

January

- ⑪ Tali-fu. Last evening we
- dined at Mr. Hanna's house using our food & cook as Mrs. Hanna is on her way to Yunnan-fu. We had Chinese cake which looked exactly like peanut brittle but made of flour coated with sugar only. Hanna has been here 6 years but does not admire the Chinese apparently as they show no gratitude & hold themselves superior to Europeans. They are neither moral or honest he has found. All their talk & actions are on the surface their whole attempt being to conceal what they think or have done. The prevalence of gonorrhea here he attributes to the limestone mountains the water apparently in some unknown way causing the swelling. Flying squirrel skins are purchased here at \$25.00 per 100 & the coats ~~are~~ ^{when} made up are \$20.00 each. The skins are tanned in the spring when the weather is warm which produces soft tanning. In cold weather the tanning is hard

+ brittle. As Talow. is not
a treaty port no foreigner is
allowed to do business here
permanently. A period of 6 weeks
is placed on their residence &
then they must depart. Evans
of the D. A. T. is very able to do
business than a native agent.
Evans is the product of an
English father, a vice consul, & a
Chinese mother. He was born at
Fouchow & educated at Hong-
Kong. His wife is a Chinese of
Hakkaian birth.

- (12) we were delayed today by the
mules who could not leave owing
to two extra loads having been added
which required 2 more pack animals.
Mr. Hanna took dinner with us
again. He has spent 15 years in
Yun-nan & twice has travelled
from Kwei-chow on his way into
the country & out also. He describes
the scenery as beautiful, good culti-
vation as in Japan but no original
forest or very high ranges. He told
us that only one European has
reached the top of Tali range as no

- horse road runs but the only narrow
man trails. Road cutters do not
even ascend so high as the hunter
cannot be carried down the steep
cliffs. He describes the country
at the summit as a heavy, virgin
forest with heavy thickets of
bamboo & brambles. The Englishman
who reached the top was lost for
3 days on his way down the Lake
being invisible from the canyon
where he went astray. Earth-
quakes Hannu says occur here
annually, chiefly in May but
none are very severe. The revolution
against Yuan Shikai started in Yun-
nan by the whole army which
began operations by marching against
Szechuan which was loyal to the govern-
ment. There was no fighting inside
the province which rebelled in
body. Last August the officials
were caught with 60 cases of opium
which they had smuggled into
Shanghai on one of their visits. The
Secretary & the military governor
Tang's ~~brother~~ were in the party
there has been little fighting in

Yun-nan since the Mohammedan rebellion 30 years ago. Old houses & vacant places are still evidence in Tali of the former greater population here. Tali fell after the 2 pass, Shan Kuan (upper) & Hsiao Kuan (lower) were taken by the Chinese troops. Then the people in Tali were massacred without offering resistance.

(13) The mules did not come until 9 AM to take the loads, so we did not get started until 11:30. Our loads numbered 26. The beasts were mules & horses small & thin much inferior to our Lichiang caravans. The day was partly cloudy cold & windy. Many people were met on the way, some with merchant wares but chiefly word caravans. The only game we saw was a large flock of cranes in a rice field near Tali fu. We met a good many Tibetans with groups of women in brown & lamas in red travelling on foot in small

parties, a funeral with return
was also encountered. It was
one of the poorer classes, the party
walking & the widow crying &
staggering in a most awful
rage of grief which is typically
Chinese. At Hsiao Kuan we
encountered crowded streets &
had to edge our way thru. We
reached the town at 3:30 & camped
in a old field on its lower edge on
the south side of the river. The
fun market was visited as soon
as we made camp. In one shop
or hotel storehouse we found 4
tiger skins from Szechuan, one
of which A. bought while I bought
a large spotted leopard skin for
\$10.00. The tiger was \$35.00 which
is not high, the price here ranging
from \$25. - \$35.00. We saw quite
a number of Tibetans wearing
short skirts & bare legged or their
wraps back fast with a Tex. Caravan
from Szechuan. Hsiao-Kuan is a
very busy place & much trade is done
here in skins, salt, tea, & grain hides.
The night was very windy.

(14) Our departure from Hsiao ^{Kuan}
occurred at 8:30 in clear cool
weather with a good fresh breeze
in our teeth coming up the canyon.
At the entrance to the canyon
a mile below the city is a
picturesque little fort with a
heavy wall & loopholes surrounding
it. The canyon at this place
is only 100 feet wide with
high grassy hills rising steeply
on either side to 2000 feet above
the river. Here piled down
thick boulders in a series of
rapids ~~that~~ becomes a roaring
torrent for several miles.
Farther down the canyon we
passed thru a village over a hot
spring issues from the hillside &
where the road crosses the stream
run over a mill wheel. Both
houses of stone are erected here for
the Hsiao Kuan populace. The
road runs high above the stream
on the south slope of the canyon.
Far below the foaming torrent is
visible a wide plain rice fields &
an occasional village. At noon

we stopped on one of the lateral streams
in a sunny grassy field. The
sides of the valley here are forested
the north side pine close & dry, the
south side shady, moist & bush
clad with some spruces, alders,
oaks, & bamboo. The alder trees
are still in green leaf. A few
paulownia trees were red & some
a bluish pink flowers & some
foliage. Long caravans of mules,
tea & firewood were met. Some
men carrying bundles of twigs
bearing large rose flowers called
tea flower by the Chinese were met.
These flowers are used in their New Year
ceremony. They looked like a species
of Rhododendron. The camp
was pitched where the Toli Lake
River joins the Yang-pi. The
country in the afternoon was a
series of fields & scattered homes
with naked oak trees & walnuts
on hill sides. A large tree like
Opuntia made its appearance
here about cultivation. Many
of the plants bore a few leaves,
4 inches long & pale yellow. The
common Indian fig cactus was

also seen about houses & stone
hedges. It is in many places quite
as abundant as in Mexico.

Graceful clumps of a tall
bamboo were seen near ^{many}
houses + on the roadside. The
Common large cane or miscel
bamboo was seen everywhere
in seed the head being identi-
cal to our Pampas grass.

At one place a few pine Cunningham
with erect cones but persistent
on them.

(15) Deer luck was good in
trapping. My traps produced
another Red Spiny rat like the
one secured near the Mekong.
There were also 3 Microtus, 3
Microtus & a Pachyura. A ~~small~~
a grayish mouse which look new
to us + some Pachyuras. We
broke camp at 8 AM in a light
fog & continued our way up the
Yang-pi River which the road
follows all day. At noon we
stopped near a wide expanse of
rice fields in low where there were
many geese, 3 of which I shot.

- Earlier I shot 3 ring-necked
• doves from a flock of several.
The day was clear & warm
after 10 A.M. The rock
• formation thru the canyon of
the Tchi River was granite but
on the Yang-pi this changed to
gray hard limestone ~~thin~~
• with red sandstone in places.
At 2 P.M. we passed thru the
town of Yang-pi & across the river
of the same name. Camp was
pitched on the riverside at the
edge of the town. The city was
like Hsiao Hsuan consisting of
one long crowded rocky street. From
• our camp a fine view of the
Tchi range was presented. The
slope is steep with a sprinkling of
snow on the summit but not much
• forest, about back a pretty little
pink flower primrose is now
the only flower.
- (16) From our camp the road
• ascends the range to an altitude
of 8000 feet. The soil here is a brick
purple a derivative of a red sandstone
rock. ~~There~~ no large *Psidium* nor

the new gray mice constituted a catch. The entire slope we ascended was pine covered (*P. monnana*) with a good coating of dry grass + some rhododendron trees. At the summit (8000 ft.) we took lunch in a open dry grassy meadow. Opposite us was a heavy forest of laurel like rhododendron tree of large size + compact habit. Several trees of another species bearing large umbels of deep red flowers were seen, also a species with single rose pink flowers. At night we made camp in a grove of pines on a dry ridge at sunset near a small spring, the only place with water we could find. There was no evidence of rodents on the hard soil two traps were set. Night clear but not cold.

(17) Theriot descended the ridge + along the Shunpi River + then crossed it. The rock formation was everywhere hard red sandstone + the soil a purple red + very clayey + hard. Day clear + warm. The country is everywhere covered by a fine growth of dry

- grass beneath the scattered pines.
- No cattle to graze it down were seen & only a few small villages and farms were seen. At 5 P.M., we reached a village situated on a ridge in the pine forest where we camped on a narrow grassy ridge. The place was called Peh-ti-ping (white earth flat).

- (18) Our catch consisted of 4 gray mice, 2 *Microtus* & 3 *Spermophilus* small.
- From the camp the road climbed up the ridge thru pine forest for 2 hours. At 10 A.M. we reached the summit where another village Sha-sung-shoo was perched. The soil here was a soft black loam & the hill sides were covered by a heavy growth of ~~pine~~ *Myrica* like trees, appearing ~~having~~ every appearance of being ideal mammal trapping.
- One of the commonest bushes thru the country we have been travelling is a broad leaved briar or *Rubus*. A fir with persistent long upright cones & the foliage of a *Juniperus* has become a common tree. White pine have also been seen.

The afternoon was spent in descending
the a small stream to the valley
of the Yung-ping to which is
intensely cultivated to rice & contains
many villages, the largest Yung
ping Hsien. The camp was
pitched in the middle of the flat
valley on the riverside near
Chun-tung. During trap setting
in the valley I flushed a quail
the only one I have seen in
China. A sparrow hawk perched
on a telegraph pole saw it at
once & caught it & killed it. I
shot the hawk after it had
carried to prey some distance
& it departed leaving the dead
quail in the field where I
found it later.

(19) Altho the valley is a level
stretch of rice fields with a broad
stream in the middle no
geese or ducks were seen here.
The traps also failed to catch
any mice & no mounds of
rodents were seen. The yunnan
flora looks comparatively recent
development. I have seen only a
few species of these are all

rather rare. The citron is a common fruit growing on an orange like tree. The natives eat the white fleshy part which is of a sweetish taste. The central cells with juice are like lemon in taste. The thin yellow outer rind has the fragrance of lemon & is used here for flavoring pudding. Dried persimmons are a common market affair here. They are dried flat like figs & taste sweetish. The stewed pears are delicious & much like grinces in flavor but when raw they are not especially good. At various places on the road we met beggars, many were begging under the guise of road-repairmen. One beggar was seen picking pebbles the size of walnuts from a perfectly level wide street but others were cutting away the upper banks & helping travellers slightly ahead. At 5 P.M. we reached the village of Sha-Yung & made camp in an old field at one side.

At noon we crossed another range
shaded with the summit at
8000 feet. A cold wind was
blowing & the weather was cloudy.
Here a heavy forest of myrtle,
rhododendron & lime oaks
covered the mountain densely.
No pheasants, squirrels or traps
seen during the day or on
the previous 6 days.

20 - No mammals caught
on the rice fields. A few magpies
were seen here for the
first time. At 11 A.M. we
reached the Mekong River &
crossed it on a suspension
bridge at a very narrow place
some 70 yds wide perhaps.
The bridge was ~~made~~ from two
large iron chains fastened into
masonry & at outside ~~ends~~ ^{ends}
around a rocky projection in
the cliff. The river here flows
deep & tranquil between
towering cliffs which rise 2000
feet above. At one side of the
bridge was a group of temple
buildings. During the day
I saw several rollers &
shot one.

The Mekong valley is deep
• & has been uncultivated. Our
• stopping place was a village
on the side of the valley about
• 800 feet above the river. From
here the road ascended steeply
up a rocky gulch. It was the most
treacherous piece of roadway we
• have met. The bed was composed
of hard flinty limestone boulders, round
& polished by hoofs as smooth
as billiard balls. The feet of the
• ~~pack~~ beasts slipped at every
step. My horse fell several
times, with only the empty
saddle & Co of the pack animals
• gave out on this stretch which
lasted for whole hours of continuous
travel. Above the bad road
our way continued on through
• rice fields in narrow valleys
& then several small fertile
villages. We finally found a
camping place at 5 P.M.
• near a few houses, amid
pine trees. The Chinese
govt. spends no money on
road repair & seem to have no

This road is a fine example of what
Leavies refers to as "good for ten years
& bad for a thousand". No feeling or
burden. The camping place
was near the village of ~~Hsien~~
Chao but as the soil was hard
no manual munnings were
to be found & no traps were
set.

(21) The summit here is 7600 feet
by Davis map which is very
low for the Mekong Salween
divide which west of here is
crossed wall covered by snow.
This country is farmed & quite
deforested. The rim above
the Yungchang valley is
absolutely treeless. It is a
series of brown grass clad
hills exactly in the general
appearance like those around
San Francisco Bay near
Berkeley & Oakland. The
Yungchang valley is a
broad long valley of rice
fields with villages
about promiscuously. It
is some 40 miles wide by
15 or 18 miles long & drains
into the Salween. The day

was bright but the valley ^{smoky}
or hazy. After tiffin we made
a 3 hour march across the valley
to Young Chang which is situated
on the west side at the base
of the hills. The city wall
includes one of the hills &
much of the country inside the
long wall is rice fields &
the hill pine forest. On the
road we met a few caravans
of pack oxen with regular double
tree Chinese pack saddles the
first we have seen with such a
rig. One of the products seen
on the road were lotus lily
stems in dried bundles. In
the city were many dried ducks
for sale. Sugar cane, citron
peanuts, dried tea, walnuts,
oranges, ~~etc~~ & many grains,
were seen. The women here
all have bound & very small
feet like typical Chinese
but are tribes people in features.
Marco Polo found them Young
Chang (Vossang as he calls it). He
describes the place as inhabited by

warriors & hunters, the women
do all the farm & household
labor. Toli-fu be also visited
by way of the road we just
travelled over. At that time
it was the capital of Yun-nan.
He tells about the salt wells
& says the revenue went to the
king as it now does to the
govt. but for at least
10 years salt has been a
govt. monopoly. On
arriving at Yung-chang
we visited several temples &
found soldiers quartered in
some but took possession
of a large Teng-yueh temple
just outside the ~~main~~ temple gate in the rice fields, south

22) At 11 AM we called on the
Magistrate in his Yamen
an old decayed temple. He
is a man of about 40 yrs.
broad shouldered & not very
Chinese in physique. He
receives us in the usual formal
way & answered questions but
showed little interest in our

- mission or our plans. The
- border of Burma where some fighting is now in progress with the natives who raise & smuggle
 - Opium into China was reported by him to be near Bhamo or west of Teng-yueh & not near Ma-li-pa where we wish to go. One of the merchants to whom Evans gave us a check for collection was quite friendly & insisted on shaking hands, a European custom never used between the Chinese themselves.

- (23) Today is Chinese New Year & a general holiday for a fortnight. The day is celebrated by feasting, drinking & giving of gifts to the children corresponding to our Christmas. I went on a visit to the city with Wu at noon. The place was rather quiet but the children exhibited new garments & toys. Paper rabbits on wheels were a favorite toy, also masks gaudily painted representing monkeys.

and other animals. The Chinese men were especially well dressed today. The temples were all resplendent with burning joss sticks & dishes of food on the altars for the gods. In front of the houses on the walls of the gates & doors were long cardinal placards bearing mottos in black letters for the new year. Fire crackers were heard in several quarters but no great din of noise however. The Chinese New Year falls on various dates in late January or early February owing to the irregularity of their calendar. The Chinese have 12 months six of 30 days & 6 of 29 (354 days) & ~~once over~~ one of the months is reckoned over twice over every third year to adjust the calendar with the sun. The temple in which we are camped is a large one & lavishly decorated. The gates are carved & painted in a range of colors under the eaves of the picturesque gates. The courts are all floored in

green slate the common paving material here. There are three shrines or altars, one within the other. The outer has 2 gilded figures of large size set in a deep niche. The ~~two~~ middle one two large statues in a hall & the innermost is a gorgeous pair showing Buddha seated on lotus flower amid a snowy cavern with many small statues in the folds & crevices. The white walls of the temple facing the courts are covered by mural paintings showing birds, beast, mural scenes, fishermen, etc. New Year is really the beginning of spring with the Chinese when winter is breaking & some of the early flowering trees are in blossom. It is also a debt paying time & above all an occasion to make social calls on all friends by a house to house canvas.

(24) The fern traps I set in the rice terraces caught two

Pachyrhizus + a Micromys. The
large temple pond which
supplies most of the water
is supplied by numerous springs
about head a great spring
12 feet wide. Bubbles rise &
immediately over this a temple
has been erected. In the
center of the pond is a
stone platform of 2 steps & square
in shape. A flock of small grebes
inhabit the lake & a few
gallinules the edge. I shot 3
of the grebes & one gallinule.
The pond is shallow & filled
by water plants, a sort of coarse
Cora covering the bottom.
Fish are numerous, a sort of
trout & a few small gold fish.
The muleteers here demand
at least \$15.00 a month per pack
mule as rent or 50 cents a day
whether working or resting in
camp. Horses are worth here
\$60.00 each as a purchase & mules
\$8.00 each per month for wages,
one mule having charge of 5 pack
beasts. The feed on the road is also to be reckoned

- Our tank developing machines
- have fogged many films recently & we have abandoned their use. The trouble seems to be due to the carbon paper in the autograph films which keeps the developer from penetrating. The apertures are new & seem to allow penetration O.K. but the films even when first soaked in water to facilitate the even penetration of developer are faulty or streaky when taken from the tanks.
 - The oranges we have purchased here in the market have been of very fine flavor. A large Mandarin or tangerine as we know it, was bought here. They are as large as an average orange & fine flavoured & juicy not particularly dry. In color they are deep orange red & give out a fine perfume. A seedless orange was found here quite similar to our Naval orange in flavor & texture which is doubtless its ancestral stock altho no navel is present.

Wilson states that oranges are propagated ~~by~~ in China by severing partially the shoot at the base of the tree & banking earth about them until they take root. In this way seedling varieties could be propagated as easily as by our method of budding. The common fan palm from which rain coats are made is grown here & being seen near every village. It is *Trachycarpus excelsus* (see Wilson vol II p. 82)

The bean we seen planted in rice fields in the winter through Yunnan is the Broad Bean (*Vicia faba*) the soy bean being a summer crop. The common pea (*Pisum sativum*) is less common here as a crop. The broad bean is a favorite food for mules.

(25) The weather both today & yesterday has been windy, a south wind blowing, altho clear.

30th

- at 9 AM. we rode ^{up} the valley
to a bat cave. We found
the place was a temple, that is
the mouth of the cave was
built over & formed the inner
chamber of a temple. The
front was graced by a
circular pond with a central
island ~~surmounted~~ by an open
structure. The water bubbled
up in a spring on the side of the
pond. We entered the temple &
found an way into the cave
at one side of the shrine. The
cave was in limestone & opened
up into a large chamber, but
did not extend far into the hill.
To one side thru a small entrance
another chamber was found
which contained several specimens
of a Myotis. They were somewhat
dormant & could be plucked from
the wall unless disturbed by jostling
~~when~~ at which a few took flight.
The stomachs of the 5 dormant contained
no food. The place is known as
Shin-pu-ssa. On the way we passed
thru several villages & saw streams in

front of some of the houses fresh green pine needles which is her years custom. Our catch this morning was a large Pachyura bearing musk glands on the sides ^{possessed} of a very pleasant fragrance. A large *Epinops nuregicus* was caught at the pond.

(26) This morning we journeyed down the valley to the cave on the Teng-tyerch road. It is situated 20 li down on the edge of the valley at the small village of A-shih-wo. The cave is within 10 yards of the road on the face of a hill about 50 feet above the valley. The entrance is high but only about 8 yds wide. It has some Chinese letters ~~chiseled~~ in the rock but no building are at the entrance. The cave runs in horizontally & the ceiling is very high. Inside it runs sharply & in places the roof comes down within 10 feet of the floor.

- Stalactites & stalagmites are to be seen in places drops of water are heard percolating from the wall. The general color of the limestone is black & sooty in appearance ^{on the surface} but this color is natural & not due to camp fires apparently.
- Some of the stalactites are silvery white & in shape like great folds of ice or snow & not unlike Buddha's throne in our temple. I suspect the Chinese got their idea from a cave of this sort. We found only one but, a large mugo-like species. Very little bat dung was seen on the floor. Bird droppings were seen in small quantities for what species ~~this~~ would have such a cave is quite unknown to us but the Chinese assert that birds do live in the cave. The cave is no doubt along here but we only went 100 yds. into it. On

the way down the road passed
a large pond, a reservoir with a
high bank on one side, some
75 or 100 ducks were on the
surface, mallards + scaup
ducks + one gray goose.
They were shy & we shot
only one, a ♂ mallard, two
geese & 1 duck were seen
in the flooded rice fields near
by. I shot 2 jack snipes
in rice fields + one of the
white crowned red bodied
water wag-tails. Below
the cave on good sized stream
of water issued from a
smaller, lower walled cave.
This water was fairly warm.

27) Collected birds today as
mammal trapping failed.
A black robin, 2 species of rufous
stone-chats, a blower bird, crimson
vented bulbul + a myna^{bird} were
a green kingfisher were skinned.

28) Continued the birdwork +
added a purple thrush, large
size the common black & white
magpie, a goldfinch, and a sky

- grasshopper, a field finch tree
sparrow, yellow wagtail,
common gray & black wagtail, large
~~small~~ & buffy meadow bird, sparrow
- hawk, olive rumped Chickadee
2 red backed chickadees (large & small)
1 variegated breasted shrike, a
blue drogon & a hoopoe
- The new mafus came in
the afternoon & tied up the boat.
Two of the large steel traps set
for otters under the water of
the pond were stolen today
by boatmen parties, all the
Chinese are thieves of property
& steal all traps they find

(29) Our road lay down the
center of the valley which we
left at noon. On every
side were flooded rice fields or
the gray-green of growing broad
beans. After lunch the way
led over brown hills of dry grass
& a few straggling pine forests

(Great Pass -

Ta-huan-shih)

We made camp near a small village in the hills. Nowhere were there natural forests. No fir trees (mentioned by Harries here) were seen. The common pine a few white pine + many large alders were ~~seen~~ the prevalent species. On the way we met several caravans of oxen + cows carrying fire-wood on the double tree Chinese saddles. Both oxen + cows are used as pack animals but the buffalo is only employed for plowing sodden and flooded rice fields. Many of these were seen plowing in fields a foot deep with water. The buffalo sinking in up to its middle. The presence of the ox trains was made known by the mellow tone of their great brass bells which are furnished with wooden clappers + strike at every step. A common

type is a bell set in a arch above
the back of the ox but some
• also had bells suspended
at the throat in the usual fashion
nearly all of these oxen were
• a purplish red in color + were
coniform as the black buffalo
in coloration. I have seen a few
• pure white, albino buffalo.

(30) The night was cold + with
a wind. In the early
morning it was cold until
10 AM, when we left the
hill country + descended
into the Shih-tien plain.
• This was similar to that
of Yunnan, ^{the only 500 feet lower} but more
tropical. ~~Many~~ fields of tall
• ripe sugar cane were seen
here growing interspersed
with rice fields, much of the
land was flooded + every
• inch of it was cultivated.
The bordering hills were brown
+ some ~~except~~ were ~~grown~~ of pine
and been left for the wood.

A flock of 7 green-winged
teal were seen here & 5 shot
but no geese or other ducks
were seen. White herons &
white-winged bitterns were
common. No turkeys or
squirrels have been seen.
At midday the weather
is really hot at midday
& the sun disagreeably so.
Many porters bearing heavy
bundles of sugar cane have
been met going toward Yang
chang. The cane is sold for
eating raw. When it is green
it is made into brown sugar
& a clear sort of gin called
wine by the Chinese. I have just
discovered that what I
thought was a true cactus is
really a *Euphorbia* of the candelabra
sort. In cutting a stem
a purple milky juice ~~sees~~
flows forth. This is the plant
which has a few spatulate yellow
fleshy leaves at the apex of the
thorny, stem ribbed stems.
At some of the villages on the

Plain loquat trees bearing ^{ripe} golden fruit were seen, a few banana plants with fruit were also noted but citrus fruit trees were not noted. We reached Shik-tien at 5 P. M. & made camp in a temple at one end of the town. The place is small & without any wall or fortifications. A post office & magistrate are located here. The town is situated at the extreme lower end of the valley where high hills or mts close in & make a deep V shaped valley of this part of the plain. During the afternoon I saw 2 flocks of the lacquered geese in ponds but they were too noisy for our powers, as Shik-tien the magistrate who visited us remarked that deforestation on the surrounding hills was due

to preventive measure
against robbers who formerly
were numerous here &
hid in the forest. By cutting
off the trees no cover for
the bandits was left. ~~This~~
sounds like a mere excuse
but it is a new phase of
deforestation to the western
mind.

(31) During the night there was
beating of drums at Shih-tien
near our temple where a dragon
parade was in progress.
The road ~~to~~ left the valley
within a mile of the town &
wound up the steep side of
a mountain over one of the
slippery stone paved mountainsides
of China. The country was
rolling & pine clad for the
next 10 miles & then descended
into a narrow valley with flooded
rice fields. The sun was in
our direction & its rays
were reflected by the flooded
fields directly in our faces
so as to affect our eyes. Water
is everywhere on both sides

of the road in this district
The valley around about
running the low brown
hills ~~covered~~ by dry grass.
In one of the large ponds
near some brickmen were
fishing we saw a flock of
15 Labring Geese ~~two~~
of which we shot 1. I shot
15 gray doves & 1 European?
Lapwing. The crested
mink bird which has
buffs & often rides on their
backs was seen here & 2
were collected. The large black
& white Starling was also
collected today. There were
by the pond many ~~hens~~ ^{geese}
cattle with large packs of
drab paper were met. This
is made of transfer of Jar
Karam. No snake came
was seen in the fields.
The camp was pitched at
Humei, 10 li below Yaukuan.

Feb. 1 Our camp was
about 6000 feet
on a small hill but it
was unusually cold
at night with frost but
no ice, warm mist
steamed up from the large
creeks & flooded fields.
The traps caught nothing.
The soil being a hard red
clay & dry at this season.
At 11 AM we
welling in the hills at 7 AM
around a forest of chestnuts,
chestnuts, pines, oaks, etc.
with soft black loam
& many undergrowth
brambles, canes, etc.
having pale blue blossoms,
some of the deep red Rhodod.
Several flowers were seen.
After hitting we passed thru a
mountain side clothed by heavy
virgin forest of many green
leaved trees. Runways of rodents
& many streams of water &
mud daub were seen
here. At 3 PM we had a

- 2 hours descent to the valley
● at Meng - for ~~low~~ which is
only 2300 feet in altitude.
The vegetation changed radically
toward the valley & the
● climate was warm even
after sunset. A small date
palm was seen on the roadside
● & many peculiar trees bearing
various berry & nut like fruit.
The valley was well cultivated
thruout. Two rivers meeting
here. The fields of sugarcane &
etc were separated by
banana hedges. After dark
a barbed wire fence barbed
● for half an hour opposite
camp across the valley.
(2) A rather heavy ground fog
or mist came up until
● the rising sun & enveloped
us until 8 AM. This sort of
morning weather is said to be
the usual thing here as well
● along the whole border at 3000 ft.
& lower in altitude. Our catch
consisted of only one small Bat & a
new 3 species with appearance of a

chouse rat. The road crossed
the Yung-chang river on a
suspension bridge moving between
great cliffs at a very narrow
place, the head of a canyon thru
~~not~~ which the river leaves the
valley. The formation here is
limestone & the soil on the
hills a bright brick red & that
in the valley a light brown ~~loam~~
clay soil. The ~~one of the common~~
trees on the hills is a ~~twice-leaved~~
Euphorbia like tree, ~~other~~ another
is a prostrate leaved ash like one
with large green acid fruit
having a single stone in the center.
The common pine is also seen
here. The hills are clothed by
a variety of trees in park like
arrangement with long luxuriant
brown grass everywhere. The
road climbed intermittently
all day & at 5 P.M. we made
camp somewhere near the
village of Ta-shui-tang
an altitude of 6000 feet I estimated.
There was a spring here & in
a ravine forest with wet black
loam where rodents runways could

be detected, Before 9 P. M. I
had a marmoset longtailed long
eared species with long hind legs
for jumping, somewhat Taper
like in general build & coloration
as well. During the afternoon
I shot a gorgeous little sun-bird
having a violet tail, yellow rump,
cardinal back, greenish olive
neck & amethyst gorget. A
brilliant cardinal & black shrike
was also secured, We have
met several parties of Shans
& their caravans of mules & horses
Their women continued to have
bound feet & the men are
dressed in blue serge like
the Chinese coolies. Only a few
of them both Chinese & their
villages are with Chinese residents
as a rule. Nearly all of them
carry muzzle loading percussion
cap guns with short barrels
no doubt for defense rather
than game gathering. The
whole country on this
Salween-Mekong divide is
park like & so pleasant. The
Shans have rather swarthy color &

flat faces & stub-noses.

(3) It was not cold at night, not so chilly as at Mung-po-lo which is 4000 feet less in altitude. The camp was guarded by a party of Shan boys & men from the nearest village which is the custom of the country. Our catch consisted of 2 gray mice, another ~~Zapus~~ like that in *Pachyura*, a *Microtus* & a larger *Eprinus* of sorts. On the way near camp I saw a striped squirrel on large chipmunk ~~near~~ across the road but failed to shoot it. Morning partly cloudy but no mist! At noon our kiffin place the road descended all afternoon into a rather deep valley in which were several villages. The largest or market village was Hsiao-meng^{ting}. We passed there & beyond it & made camp in the hills at the edge of the valley. Here we saw some women with inclosed

feet + some wearing shirts
of the common blue serge.
On the outskirts of the village
two parties of small ravens
were seen picking the skeleton
of some domestic animal.
I shot several of these + Hsi-
wi carried them followed by
a great host of carrying ravens
thru the village. The villagers
stared at us in groups + were
much amused by my shooting
doves with the 22 automatic.
The valley of Hsiao Mung-tung
is a picturesque affair, on
all sides tall spire like
mountains rise bound &
separated by deep narrow gorges.
The forest is chiefly pine in
block in a semi cultivated
state.

(4) We continued our way
along a ridge thru farms
+ scattering ~~these~~ groves of
pines + alders. After
tiffin we descended into
a small valley to a town
Hsiao-tien or T'atien where the

(Yung-Kang) alt. 3000 feet.

Chen-Kang magistrate ^{resides}
Just as we arrived a light
rain began to fall so we
made camp in a sort of
temple in the village. For
the past 3 days we have met
several small caravans
bringing bales of raw cotton
covered by matting from
the south.

⑤ The rain continued all
night in a sort of continuous
showers. The post office name
for this town is Yung-Kang
but neither of these names
are on Hearn's map. The
magistrate was away on the
border detecting opium smugglers
& raisers of poppies. His
secretary however did the
duties of the office. In
some of the shops lots of
dried (headless & footless) human
skins were found. Some were
gray like waterbuck, others
red like muntjac. They
are said to come from farther
south near the border in Yunnan

country, Red muntjac & one
serow skin was also seen

• I purchased. A leopard skin
was in the market also.

Lambton muntjac, bower

• bear, & leopard were said to
occur 5 days north near the
Burma border. The

• Joma Shans here wear the
usual blue serge, the women

• wearing skirts & turbans with
bare unbound feet, they are
a short stocky people with large
heads & bronchy features.

The day here was a market
day but the chief products

• seemed to be bundles of horse-
tail rushes, grasses, etc. with

some turnip tops, & a broad
short coarse tasting banana.

The Shans here are all said

• to be suspicious of strangers
fearing that they are opium
detectives. They are said to

hunt sambar by driving with

• dogs & by firing the dry grass.

• Driving with muskets. Today
I tried some of the tobacco on men
smoke. This fine shredded tobacco

pale colored like mintish tobacco.
It is very mild, & some I
smoked had scarcely any
tobacco taste or odor & it
bit the tongue like most
mild tobacco. They smoke
it in a brass pipe a pinch at
a time good for 3 puffs.

(6) Last night the rain came
in violent wind squalls,
one of which at midnight blew
my tent down. During
the morning I hunted in
a grove of large green trees among
which I noted the killer for
with its network of straggling
branched trunk & turned
about several trees. Another
tree had a trunk erect
trunk & spreading crown.
A common tree here is a
large tree with an immense
spreading crown & a short
buttressed trunk of ten or
great diameter (15-18 feet).
Five olive squirrels were seen
on the trees & 2 of the squirrels
were bagged. At noon it

cleared & we continued our journey at 1 P.M. Showers however were encountered during the afternoon. The cactus like Euphorbia is used for hedges everywhere. Another common hedge plant is the gray Mexican pulque plant or century plant. On the hillside maize fields were seen but the valley all around devoted to rice. In winter crops of broad beans or what were seen. The rock formation is everywhere gray limestone. The hillside bright red clay soil which is very slippery or greasy when wet. I saw one limestone cave which connects with one of the sink holes or basins seen here in the hills. We camped at 5 P.M. at the village of Moomoo in an old temple on the sidehill above the rice fields.

The Shans have their teeth
blackened like the Annamites
but only the upper are thus
darkened. At 4 P.M. we
met a troop of a dozen soldiers
returning apart from Alpin
inspection with 2 mounted
men - official doubtless.
Two of the men were beating
gongs which gave out a very
soft mellow sound like some
striking clocks. This sound
could be heard a mile before
meeting them & was quite
delightful amid the rolling
hills. Whether it is a
device for warning offenders
or simply an entertainment for
the road was not evident.
obvious. The opium poppy
is secretly grown here &
the govt. is trying to suppress
its cultivation. Smuggling takes
but is controlled at the port
by officials stationed there.

(7) No rain fell during the night
which was brilliant with a full
moon. A runner from Shih-tien

arrived before bedtime with a
telegram + some letters. One
Microtus + a dull red brown Salamander
comprised our catch. The road
ascended all day. At 5 P. M.
were well in virgin forest on a
high ridge covered by forest, bamboo
thickets + dry grass + weeds.
Great cliffs of gray limestone
could be seen peaking out
of the forest. The forest had
no pines or evergreens in it
being green leaved trees of laurel,
evergreen oaks, figs etc + somewhat
tropical in character. The climate
was cool at noon + frosty at night
the altitude at least 7000 feet.
The forest was damp, the trees
overgrown by moss. Small
traps were set about camp
which was pitched in a
open meadow at the head of
a forested ravine with great
limestone cliffs looming
up out of the forested ridges
above camp. Before going
to bed we looked at our traps
+ had 20 mammals; chiefly a
gray small Apodemus, a

1. Mu cheng lives 40 li beyond
Flowerdown than camp.

new rat + 2 Microtus, one
of which was very small (foot
only 14 mm.) + new to us.

⑧ The night was cold with
a heavy frost + some ice.
The day was clear + warm
without a breeze. A party of
hunters came from the
village 10 li away + hunted
near camp for muntjac.
A fox was flushed near A who
was with the hunters but by
mistake he did not shoot at
it. A muntjac was heard
barking. More small
mammals were secured. The
proboscis shrew, a ^{Silvery mole} Micromys
Red bellied squirrel + in the
afternoon a Turpin like insectivore
with naked tail + mouse like
terrestrial feet.

⑨ The night was clear + very
cold with heavy frost + thick ice.
It seemed the coldest camp
in all China, colder than Hsiao
chung-tien where snow was
abundant. Two more of the
peculiar Turpin-like shrews

- were caught, a small Sorex
• also & a Epimys (small)
In all some 40 specimens were
taken. A. went out with the
• native hunters but shot no
game. He saw a sambar
disappear over a ridge at
which the hunters flushed.
• The dogs however would not
take the fresh trail.

- (10) Several new mammals
were secured today &
now we have ^{species} 15 from this
camp in 3 days collecting.
3 chipmunks were shot, a new
large georgian rat, a large Epimys,
• a common Tupia, a long
tailed Sorex the latter found
dead in the road. A. went out
again with the native hunters but
• saw only a muntjac which
the dogs drove down a side
hill just a lot of villagers. This
morning at 10 am we looked
• within 100 yds of camp from
the forested side hill where
some men went after it
it showed again where they

entered the wood but they could not find it. This evening at dark another muntjac barked from the opposite side of camp. The bark is very loud & explosive. Yesterday some of the hunters drove a serow thru the forest near camp but the cover was so thick that we could not see it pass. One of the men threw a spear into its thigh as it passed within 10 yds of him. This morning at daylight a deer was heard barking & said to be a sambar but this was a mere guess. Day partly overcast with a wind from the east but the night was clear & cold.

(11) Last night at dark some native hunters returned with an old ♀ sambar of large size the skin & skull of which they sold us. She was nursing & the ~~breeding~~ birth season being either at its midwinter or else it is an all-year affair. She had no hoof glands ~~at~~ but on the

- hind legs were tarsal glands.
- The lachrymal pit was deep but not large & the gland quite small. The whole underside of the tail was covered by a deep brown liver colored gland nearly to the tip. I went out this morning with the hunters who were accompanied by 7 dogs, 3 white ones a gray one & 3 black ones. They were not able to follow trail but seemed to depend on jumping the game. I dragged a ^{very} adult & runt.
 - Jac the first hour but their dogs were not on its trail & even my 3 shots did not bring them. These deer are bright red & as conspicuous as deerbuck which they resemble in habits keeping always in cover. This one stood in the brush 400 yds away & I hit it behind the shoulders but it soon got up & ran down

hill where I shot it two times
more. The horns were just
budding & on the forehead
were two deep longitudinal
folds in the skin. We
continued our way on
up the ravine the men
& dogs going well up the
hill above us. Finally
we arrived at the forest &
ascended thru the trees
up a ridge to an old
clearing toward which
the men drove but nothing
was flushed. There were
however trails in the forest
& piles of rather fresh dung
on its edge where the deer
stand & look over the
fields & presume. A very
few tracks were seen on
the edge of fields. The sambar
live here in the forest & are
sometimes to be driven
out of the tall grass but
apparently never do they
leave cover ^{voluntarily} during daylight.
Two or rather 3 new mammals

were added to the last lot
a small Sorex, the mungie &

the sambar

- (12) The prize today was a fine
large ♂ Civetta which I
caught in one of the wolf traps.
When I approached it growled
or hissed like a house-cat
& opened its mouth & bared
its teeth like a ferocious
man. We took several
photos of it in the trap. The
dorsal mane stood upright at
all times & was very conspicuous.
The scent glands were very
large & gave out a pleasant
odor altho when cut out &
held to the nostrils the odor
was rank & overpowering.
A new shrew the short tailed
large headed Sorex of Sichuan
Snow Mtn. was caught today.
I found on one of the trails a
dead Proboscis Shrew in good
condition, dropped by some pred-
atory animal. I have no doubt
in the late afternoon I went with
Li Mi to the forested ridge where
we found the sambar trail yesterday

day I set two wolf traps on the trail. The natives were plowing the hillside nearby & were at night camped in the field under light bamboo huts with their oxen grazing nearby. They do not live more than a half mile away but save time by camping in the fields I suppose.

(13) My walk out to the trap set on the Sambar trail was in vain. Only one fresh track that of a muntjac was seen on the road thru the plowed field. I caught one of the long eared rats first taken at Ta-shui-tang. The hunters did not come today so we had to content ourselves with skinning small mammals 4 of which we had on board. The district here was once more thickly populated when poppies were the legitimate crop. Now since the opium embargo many of the fields have grown up into weedy places. The hill crop here seems to be chiefly corn or maize. This district is

- in the ^{Shan} state of Keng-wa & is quite Indian in its courage the mepce being the only accepted com. by the Shan population. Last night about 11 P.M. we were visited by a violent thunder storm, accompanied by sleet rain & strong wind. This storm lasted about 3 hrs. & ceased very suddenly, the ^{evening} being cloudless & the morning clear altho clouds appeared again soon after sunrise.
- (14) The native hunters failed to appear again but in the afternoon we went out & beat over a few brushy hills with our rifles without however flushing any game. The traps set on the Shanber trail caught no game. The small traps yielded no new species. The commonest forest tree is a large laurel leaved one which produces an acorn like nut covered by a large husk covering. Many of these nut & covers were found under rocks

& in holes where ^{the} mice ^{rats} ~~trails~~
had carried them. In appearance
the forest here looks like that of the
Yunnan Escapement ~~not~~ in the
haunts of Brought Bant
pig.

(15) We broke camp this
morning after a stay of a
week here in which time
we collected over 200 mammals
of 22 species. This camp
has exceeded in number of
species in abundance any
we have had in China, not
excepting any of the Snow
Mtn. camps. About 11 mi
passed thru the village of
Mu-cheng situated in a
narrow valley filled by rice
terraces. The whole way
the road descended to a
tiffin place amid fig
trees with large figs near
the stream over broad elliptical
leaves. A leafless Erythrina tree
with red blossoms was also seen
near streams. In the field edges

Mammals of Muo Cheng
Forest (Hap-ho) 3 hrs above H.C.

- 1 *Tupaia* -
One purchased alive from ^{local} villagers. Not seen here which is
doubtless too high or out of its range.
- 2 *Tupaia* - like *Dissectum* -
many secured both at night &
during day in the forest under
logs & about rocks. Stomach
contents of all examined a
white vegetable pulp like that
of some seeds.
- 3 *Proborcis* *Sheeni*
abundant in forest.
- 4 *Silvery mole*
Several taken in forest under
logs & roots of large trees.
- 5 *Sorex* - small brown.
One secured only.
- 6 *Sorex* - pigmy -
Many taken in forest. In
size it resembles the Snow Mtn.
village species.
- 7 *Sorex* - short tailed (bright headed)
Three only, secured in forest.

8 Civetta -

a large ♂ trapped at camp,
Tracks of others seen. Stomach
contents, rodent hairs & bones.

9 Cervulus -

One shot, a ♂. Many heard
barking at night & on cloudy
days at noon. One other
seen & a few tracks on edge
of fields.

10 Cervus (Sambar)

One old ♀ brought by native
hunter. A saw one on drive
disappear over a ridge at 500
yds or so distant. Tracks, trail
& dung seen in forest edge
bordering clearing. Forest
inhabitant doubtless.

11 Red-bellied Squirrel -

A half dozen shabby A. at
camp from a large tree. Not
seen elsewhere.

12 Chipmunk -

4 shot from same tree. One other seen
in bush at camp.

13 Giant Rat.

- Two caught in forest, Allied to 10 in giant rat.

14 Spring black rat.

- Two taken first night but not afterward secured.

- 15 Spring (white bellied)
after caught in forest

16 Spring (small)

Two only secured.

17 Apodemus (long eared)

- Two taken. Same species as secured a few days previous at Ta-shin - Tang village

18 Apodemus (long tailed)

- Most abundant mammal many secured.

19 Apodemus (filvous)

One secured on last day.

- 20 Microtus -

Several taken under logs.

21 Microtus (small black)

Abundant under logs.

creek banks

22. Microtus (Mammals)
a few specimens taken only.

23 Talpa -

Runways for mole seen
at camp but no caught in
traps set in such places.

24 Vulpes - red

One seen by A. Macdonald
near camp.

25 Erinaceus norvegicus

One brought in by the villagers

were bananas & bamboo ~~trunks~~
Several of the large purple
• thrushes were seen in bushes
lining the creek & on the hills
were perched the white-capped
• rufous water wagtails. I shot
several of the 15 colored sunbirds
also a large parrot green honey
• creeper & a vermillion shrike!
On the ^{old} corn fields a growth
• of Pteris ferns was everywhere
present. On many of the trees
the large potted form of
leaved climbing lily was
seen. In the afternoon we
climbed up again out of the
valley we were following &
• over a pass into another which
led down to the Meng-tung
plain. Near the pass I shot
a species of very small chipmunk
• having a clean buff belly, striped
back & the usual white tip to
the ears. Later I saw two others
in the same tree a sort of live
• oak. Feathers in a museum set
I shot another fine ♂ from a
cedar-like tall tropical tree.
Two species of flycatchers were

the drab or dusky fan-tail +
a small yellow + green one
seen everywhere along the road-
side. I also shot a malachite
blue species. We made camp
at dusk far down the mountain
on the edge of the Meng-tung
plain. To the beyond was the
village of Bah-tzu-tai. The
camp was situated on the edge
of a fine clear stream margined
by growth of large bamboo
fig trees + others of tropical
character. One of the figs was
a tall white barked tree
bearing reddish figs in branches
some of which were lying ripe
on the ground. ~~The~~ Another
species had ~~large~~ rough blackish
bark spreading limbs, numerous
elliptical leaves + figs ~~at least~~
of large size 3 inches across growing
from the main trunk or short
sprouts.

(16) The night was clear +
calm without frost but pleasantly
cool. No mammals except
a house rat were caught here.

In the morning I looked
thru the trees but could find no
chipmunks or squirrels.
At our camp were several of
the young ^{white} stemmed naked
~~white~~ Erythrina trees bearing
red blossoms at their topo-
most branches only. The way
led down the valley along the
stream & then over a low spur
& down into the ~~Wapiti~~ ^{Wapiti} valley
We reached the river at 11 AM
& were ferried across in two
canoes lashed together. The
river is rather rapid dirty
stream with sand banks
The valley is several miles broad
& flat covered by a heavy growth of
tall cane grass 10 feet high sim-
ilar to ~~that~~ the elephant grass
of Uganda at the Nile. A few rice
fields are the only breaks in
this jungle. The lack of inhabitants
is due to the poisonous malarial
which reigns here in summer.
The sides of the valley are steep
mountains or hills of hard red clay

with gray limestone cliffs in ^{some} places. This country is forested by a great variety of ^{tropical} trees some of which were in blossom. A notable one is a walnut like tree in foliage & smooth white bark which bears a profusion of ^{purple} rose red flowers. Another small tree bearing lavender flowers in great panicles ~~was~~ notable. Flies & bumble bees were ^{numerous} in the forest. One of the largest lianas or vines bore the best pods of a great bean 18 inch in length & $1\frac{1}{2}$ inch broad. A common tree was the bilobed leaved leguminous one seen first ~~near~~ below Shib-
ten. Then they leaved acacias like trees were also seen & in spots a great spreading banyan. After taking
affairs at the ferry we travelled down the valley following the Nam-tung river

- them level rice fields & an occasional village. The huts here have high steep roofs of grass thatch. This eastern side of the valley is well cultivated but the fields have often the appearance of being allowed to lie fallow.
- At 5 P. M. we reached the chief village of Meng-tung & camped in some rice fields nearby. The headman is a youth about 17 yrs. the office being administered by a Chinaman of middle age.
- Many Shan priests were seen here dressed in deep yellow togas. Every Shan family must furnish one son to the priesthood who educate him but he need not remain permanently attached to the church.
- As dark we heard the priest singing the service which sounded much like that of the Catholic church as regards its rhythm.

(17) We remained in camp at Meng-tung as tomorrow is a market day when great numbers of the neighboring tribes come here to trade. The town is divided into two villages by a fine wide stream & the bordering open meadow averaging a space of 200 yds or so. The houses are composed wholly of bamboo the supporting poles being bamboo. The sides are made of split bamboo which makes boards 12 to 15 inches wide & the roof is of straw thatch. The only iron-dried brick I have seen is in use for walls about temples, etc. No small mammals were caught here altho there are fine tropical forests & rice terraces, the ground is too hard. Carnivorous ground ants I have not seen or have been annoyed by.

biting flies or mosquitos
at night. The only mammal
trapped has been the brown
rat 3 prings novegicus
This morning we had a
heavy ground fog which lasted
until 10 A.M. Yesterday
there was a similar fog
which ran from the
hills the valley being filled
by a fleecy white mass on
which we could look down
& on which the sun was
shining brightly as we descended
to the valley.

(18) ~~The~~ Last night people
were packing the village
with loads for the market
day. All morning they
streamed in by small
parties carrying loads on their
backs or on poles Chinese fashion.
Most of the people came
from the east side where
a high range bounds the valley
as a wall & reaches 9000 feet.

I visited the market at
10 AM. & found it in
full blossom. ^{messy like}
cane - line. Several
different tribes were the
chief components & I saw
a Chinese was in evidence.
No women with bound feet
were to be seen altho
there are a few residents here
in the market. When numbers
approaches all the Chinese
leave for the highlands to
the north to avoid the
malaria which is often
fatal to them. Some of
the tribes were easily recognized
by their dress which was quite
distinct from the universal
blue of the Chinese. The women
of the tribes wore skirts or
wraps & bare feet in marked
contrast to the dressed
Chinese women. The men
often exhibited tattooing on
their thighs & in some cases
as a girdle about their waists.
The tattooing was very elaborate &

involved so that most of the
surface of the mountains covered
by a freeze of rigors, squares
& creek borders. The of never
appeared to be thus ^{or more} ~~or more~~
evident. Some of the women of
certain tribes wore black
dresses with short skirts &
leggings of black & red with
black horse-hair garters
or bands above their calves.
Their hats were of the wide
brimmed conical yellow
type of Chinese but were
readily plated bamboo &
had a short cone for the peak.
Many women were seen
with ~~cardinal~~ or bright
green skirts, & some with
maroon the material ap-
peared to be silk. Various
sorts of vegetables were offered
for sale, turnips, seeds, rice,
sugar-cane & yams, water chestnuts
bananas, oranges, lemons
dried persimmons, etc. I
saw several baskets of land-
snails, a food I had never

seen before in any markets,
Chinese cloth, cotton, thread
+ Chinese merchandise was
on display. The long Chinese
swords in wooden sheaths
were offered for sale. Some
~~of the~~ dried salt fish +
salt in blocks was a common
product in the market.
Some of the natives affected
a soft brained stam ^{back} of
Chinese size, the sides of
which were folded down
almost like an ^{our} sun-bonnet.
The bright yellow robes of priest
added much color to the market
scene. All of the ^{tribe} ^{people} here chew the
betel nut, both $\sigma + \phi$ their
mouths being stained dark red
+ their teeth black + they
expectorate a blood-red fluid.
The Chinese here smoke opium
at the tea-shops in public +
most of this race are said to
be addicted to the habit. The
number of races here are
at least half a dozen. There are
Shans, Chinese, + another or

Mohamadians, Burmese,
• Jais, Pirmans, ~~etc.~~
• Solos, etc.

• 19 At daylight when we
• arose a light rain was
falling but only at intervals
• thereafter we got packed
+ started on our way at 10 A.M.
• in a cloudy sultry weather. A guide
had been obtained who took
us down the valley to a place
on the Burma border at the village
of Man. Khah. There was level
over level rice fields for
about 6 miles + then the
• valley closed in + the river ran
thru a dead jungle clad ravine.
The lower part of the valley
was choked by tall coarse
• grass much of it showing heads
like pumpkins. The
steepest sides of the ravine were
clothed by giant Bamboos
• bananas, corns, elephant
eared grasses of great size
acacias, fig, etc. Near some
of the village immense fig

trees were seen as shades
near the house I saw
a few papia trees loaded
with fruit & one field of
pine apples, at 5 P.M.
we made camp in a clearing
in the forest not far from
the border, just before reaching
here I saw some of the
small chipmunks in the
tops of fruit trees & shot 6.
They were wary & kept
out of range as a rule
& were actually running all
times in leafy trees. I shot
a beautiful blue winged green
bellied forest flycatcher also.
The rain fell in the afternoon
while we were pitching camp.
The camping site was a level
series of old fields in the
heart of the forest.

(20) In the morning I shot 3
more chipmunks & also
a large red bellied squirrel.
Some of the chipmunks were
seen on the lone leafless rose
flowered tree along the

budding blossoms we continued
our way thru the forest over
a very wet slippery clay road
which ran well up on the side
of the valley ~~not~~ away
from the level valley bordering
the Nam-tung river. The
forest here has little of the
appearance of that of Peru
with Amazon headwaters
~~but~~ lacking palms almost
absolutely. I saw one
member of this family, a
small stemless maiden.
I saw fern leaves only. There
are no tree ferns here either
just the leafy white stems
trees of fig like appearance as
like those of S. A. & Africa also
At noon we reached some
cultivated fields at a place
called Mangosa where we
made camp under some
giant spreading fig trees when
the road crossed a creek.

The Shans who live here are hunters & offered to guide us to Sambar, boar, muntjac, leopard. Neither tigers or buffaloes occur here they told us.

(21) Some of the resident Shans, (12 men) went out driving with A but nothing of big game was seen. The traps caught several large *Parhyzras* + house rats.

(22) We had better success today + caught a large new *Epimys* + a new large *Sursectivore* like the one of Mucheng. A caught a *Palecat*. At noon A + O called me out to witness a large civet cat eating only the cook ~~part~~ of the kitchen. I shot the animal which proved to be ~~at~~ in lean condition + probably sick which may account for its boldness. A monkey was also seen while driving game + we Sambar

was flushed but escaped.

In the morning I saw
a flock of jungle fowl at
the edge of a field. There were
2 cocks + several hens but they
flew away into the tall
grass + trees when I fired.
Their notes are clucking affairs
like the barnyard fowl. The
5 or 6 jungle fowls + the
hens blackish. In the
afternoon we were visited by a
boulder-throated.

(23) All of the Shans favour
this country chew beetle-mut.
Both men + women have the
habit. Their mouths are stained
dark red + they expectorate
a blood red liquid. The palm
which produces the nut I
have not seen growing here.

A few days ago I saw
the building of their houses
which are two stories, the
upper part being a sleeping
room as it is dry + cool.
At noon they had the pullan
up + by night it was finished
+ attached. None of the

made of bamboo, the pillars
& thatch excepted. I caught
a large red spring rat like the
one taken on the Mepong first
but larger. Several civets
were trapped today.

(24) Another red rat was
secured in the forest below
camp, also one of the gray
spring mice as well as *Dachyusa*
& large *R. pirum*. A small
agouti in a steel trap.
The birds here are all very
shy as every native carries
gun & shoot game for the
poor. Small birds are few
in numbers & species and
are also very shy. Today
while shooting at some red
bellied squirrels I flushed a pair
of large black *Phalacrocorax* out of a
high tree. They looked as
large as monkeys as they
scampered away.

(25) One of our hunters brought
in a large gray monkey which
he had shot. This monkey

had a girdle of elephants
tattooed about his waist &
was tattooed below the knees
also with figures of tigers.
This is the first man I
have seen tattooed below the
knees to any extent.
I collected another red net &
one of the short tailed insectivores
also a new small shrew - a
Pachyura. No rain fell
today altho it was cloudy
as usual with a heavy ground
mist in the morning. Considerable
opium is raised here altho
we have seen no poppies. The
Shans have little difficulty in
bribing the Chinese officials to
allow them to break
the law. A few rupees is
sufficient. A fair is a large
market is assembling in
the village below here one day
at Jo chun where the market
recurs only once in 3 years, a
long unusual interval.

(25) The natives who live here

do not keep dogs I suppose
owing to the climate being unfa-
miliar to ravages by ^{guard} dogs.
At the town many ^{living} ^{seen}
many dogs but the natives on
the road as well as at the market
had none with them. The only
crop cultivated here is tobacco. The
rice fields all show neglect.
On my way back from the
village I witnessed an unusual
animal hunt. In the meadow
I saw a brown weasel which
had evidently run down two
large rats which ^{could} ~~run~~ about only
slowly on part of it. When we
came on the scene the weasel
retreated hastily into the sword
grass & the rat soon after followed
not going beyond as in slow
bounds. The day was cloudy
& this scene took place at
10:30 A.M. on a bare rice terrace
or field of low terraces. At dusk
I shot a bat near the creek
opposite the village. It was
very small & had an absolutely
flat thin skull quite different from
any other genus I know.

- (27) Another polecat was caught today, also 2 of the short-tailed insectivores & small shrews & large E. pringi. I bagged a squirrel the common red-bellied species & one Mohamaden hunter brought in a large black & white Hornbill. After dark a muntjac barked the first I have heard here. The sun set clear the first day of ^{clear} weather we have had.

- (28) Another fair dry day with a south-west wind favored us. The catch consisted of ~~two~~ squirrel squirrels, chipmunks & short-tailed insectivore & one of the small flat skulled bats shot at the creek. The people who live here are Mohamaden & therefore keep no dogs or pigs. They have herds of buffalo & a few zebu oxen but no other live stock. The country here is remarkably free from carnivorous ants and no specimen has been eaten. Mosquitoes are rare as well as biting flies. The soil had great deep holes in many

places which extend straight
down + are made by termites
apparently. Many loops
lying on the ground are marked
by a line of earth built up
by the termites which have
eaten holes in them. The
climate here is now ideal
the nights cool + the day
in the shade cool also, only
hot in direct sun. shine.
A species of brown monkey
has been heard daily
making a whining bird
like chirping call. A wounded
tiger today but lost
them in the trees.

March 1 I finally shot a
Patang today in
the tree where I first saw
a pair. This one was a ♂ +
was feeding in the Rose flower
tree of Wolnut like shape
foliage. A Shan hunter
brought in a Trogon which
he shot. I shot a white + black
hornbill + a barbet at camp.
A got our first jungle fowl, a ♂

much like a ^{red} game in color.

We have heard them coming in

- the bush nearly every day but they are too wary to shoot easily. No trap has been stolen here altho the natives have seen them often. They are more honest than the Chinese & Tibetan tribes who stole traps on sight on all occasions. Their honesty is doubtless due to the wildness of the country & lack of civilization to corrupt them. Every man here carries a gun for protection, usually loaders, but action rifles Winchester & ancient type etc. besides a long sword in a wooden sheath tucked under his belt. At dusk the Shan hunter returned with 2 ♂ Gibbons of a light brown color. They were long haired & a faded brown like ~~monkey~~ carmel. They were tailless but had distinct ischia callousities & very long arms ^{which} ~~their general shape~~ gave them

the general appearance of sloth

② This morning I went out with the Shan hunter for monkeys. We went down the road past the village & into the forest where we have heard the monkeys howling every day. At 10:30 we located a bunch of gibbons in a rather leafless tree of large size. They stared at us at 100 yds & I fired at them as they hung suspended by their long arms but did not kill any. They moved off by dropping to the ground or at least to the lower trees & bushes. Soon afterward we heard some howling & found no trouble finding them by their notes. They were in low leafy trees & I again fired with the rifle but missed. They gave utterance to the long wailing notes which we stood looking at them & even after firing twice they kept calling. ~~then~~ disappeared thru the bamboo & underbrush. The note is a long wail beginning

low + ending in a howl ^{somewhat} like the
spotted hyaena but much
• louder + clearer. The call can be
heard a mile or two + is uttered
only in the morning from dawn
• until noon. The Shan
hunter seems bare limbed
• beneath the very thorny underbrush.
His legs were tattooed down to
the knees heavily + ~~from~~ below
• the knee with a few stray
figures. About his waist were
a girdle of elephants tanned.
Poisonous snakes I suppose
are rare on this sort of trail
• wouldn't be popular or safe.
The woods are everywhere over-
grown by small vines ~~but~~ which
• entangle the feet but large
creepers are not often seen.
At a mudhole in the forest I
• saw a few Sambar tracks +
later saw some others on a
forested hillside. The footings of
herd of wild hogs were seen
• in many places + looked very
fresh. A few muntjac tracks
were also seen. No deer
or beds of any of these animals

were seen + I feel that they
are quite rare here. No palms
were seen but a few large
slender aloes grow in the
forest. Giant bamboo
filled all the creek beds.
Biting insects + mosquitoes
were not met with, as
dark as I was waiting for
bats in the forest I saw on
the top of a ~~side~~ tree two monkeys
working on a dead mango
well out of reach of leopards
or other climbing carnivores. I
shouted them + found that there
were really two pairs of monkeys
the pairs sitting beside each
other + appearing as one. I fired
but they got away wounded. A
caught a palm civet. A new
mammal for this place also
a fine polecat + genet. The
Shan hunter shot a ♂ of the
large gray long tailed monkey.
③ I went out with a rifle
to the same place where we
saw the monkeys yesterday
but we failed to find any as

- we arrived at 10 o'clock when
the gibbons were ceasing their
wailing yell. Sometimes the
yell mutt. soon but most of
the noise is made from 7 A.M.
to 10. I shot 2 olive squirrels
in the culpe or mud hole in the
forest. There were many more
about the great trees chasing
one another making a clucking
noise like hens but much softer
than the note of the green man-
in specimens. I shot a tiger
the first I have seen here.
- ④ To day was a red letter
day for me. In the morning
starting from camp I shot
a hen jungle fowl + a
francolin in the rice fields +
one of the little white breasted
rust or gallinules of the creek.
- All three species I have seen
before but was not near able
to bag one. Further on along
the trail thru the woods I shot
2 fine cock jungle fowl on the
path. From the trail I saw
a herd of Sambar deer or large
feeding on the leaves of a tree

Acacia tree. I got within range
of them + bagged a fine ♂ + ♀
there were about 20 many half
grown young. No sound or call
given. The same off from the trees
+ later I saw + heard them clumping
thru the dry bamboo thickets.
They contained small haired
embryos of a light coral red
but all the half grown ones seen
were blue-gray like their
parents. We then proceeded
up the path to the open field in
the forest + to the culpe down
the hillside did not call. At
11:30 I heard a rustling of branches
+ discovered a herd of Macaques
feeding in a great tall tree of
the budding flowers + leaves.
It was a semi-erect tree + the
Macaques could be seen leaping
on the buds + droppings from
to the ground which was the
noise I heard. A low wailing
was at times heard also. I fired
at the largest + then at any
within range as they rushed
past me. The ones I got
were the largest ones light faced
+ the other with dark forehead bands.

to a small one. No large bones
to all were in the head only.

- The head scampered away ^{from} the bamboo & were soon out of sight. A. had no ~~of~~ lunch specimens today. The three genera of monkeys which we have collected here are all that occur in India in a China as day animals & they are all fairly common here. The gibbons are doubtless the rarest but as they call continually they are the most easiest to locate as well as the most conspicuous. I saw my first palm of considerable size today in the forest. There is a maiden tree ^{of} species 30 feet tall with a diameter 10 inches in diameter.
- 5) Another day was spent hunting monkeys. I met the *Leuconopithecus* in the same trees near the road but they scampered away on my first shot & I failed to get any. Several I saw appeared to have orange bellies but later I discovered one

shooting one that they were
peevish with the orange
colored newly hatched young
clinging to their breasts.
~~At~~ At noon I found the
Gibbons, a party of several
males which were very
timid & ran away at once.
I followed down hill & separ-
ated them & soon after I
heard them calling to
each other apparently trying
to unite again. ~~At last~~
I returned at 3 P.M. with
one old ♀ *Samopithecus* & a
live egg about a week old which
I found ~~attached~~ near her. The
young kept up a plaintive
call & one old ♀ stayed
nearby apparently wishing to
assist it but I frightened
her away. There was the head
mouse, moved away as
soon as I shot. Well up
the small ravine today I
saw a number of Maiden-hair
leaved palms of large size & so
familiar with bulging trunks
like the royal palms of Indian
drawings. Quite a number

Mammals of Burma Border

1. Hylobates

Heard during raining the note
a rising whoop of great volume
+ capable of carrying a mile or half.
The herds consisting of 3 or 4 to
15 or twenty of mixed ages.

Old ♂^{ling} by themselves in herds.
~~Note on~~ call uttered only in
morning and bright days from dawn
to noon. On cloudy weather until
late afternoon. 2 ♂ & 1 yg ♂ collected.

2. Semnopithecus

Seen in herds of 4 or 5 to 40, mixed
ages & ages. No call note when
alarmed a squeaking note is perhaps
to keep herd together. Found a large
herd of Asian. Nearly born
are carried on the bellies of parents &
at first give one the impression that the
parent has arranged such underparts

3 *Macacus* -

I have near one large herd of 20
+ a party of 4 old ♂s. I saw the first
2 ad ♀ + one yg was shot as they were
feeding on the flowers of a large tree
just leafing in the forest. No alarm
note or call was noted.

4 *White Shelled Bat* -

Common near camp at dusk
6 were shot. High flickering

5 *Cervulus*

Several heard bawling at night.
A nursing ♀ shot by Naitin hunter

6 *Civetta* -

Three trapped + one shot as it ^{was} ~~was~~
which boldly entered the camp ^{at night} kitchen.

7 *Genetta*

Two caught in steel traps

8 *Yomura* - Pale ear

4 caught in steel traps

9 *Pardoxurus* ? *Palm civet* -

One caught in steel traps

18 Rats

One secured from a ^{forest} ~~part~~ ^{part} of the forest.
Another pair seen by A. Rare

19 White Squirrel -

Abundant in forest in small
herds of 5-10. Note checking hen-call

20 Peppery Chipmunk

Many seen in forest feeding
on buds of rose flowered white bark
tree. Keep high up 50 feet or more.

21 Spiny Red Bat.

A fine large red bat secured in
forest but rare (5 specimens)

10 Short-tailed Insectivore -
Several caught in net traps set
in the forest grassland.

11 Pachyura - large
Most abundant small mammal
in forest & on edge of streams.

12 Pachyura (small)
A single gravid ♀ with 2 embryos
secured in forest.

13 *Tupia* -
One caught in steel trap set
at edge of creek

14 *Spizella* (white bellied large)
Very common in forest & on
creek margin

15 *Spizella* (dark bellied)
Rarer but habits like last

16 Spring Gray Mouse (white belly)
a few taken in forest near camp

17 Spring Mouse (dark belly) One collected

adds

22 Sambar

One beebat of a deer + find
of hyaline hunter. Tracks seen
in forest but not common.

23 Mottled Scops Owl

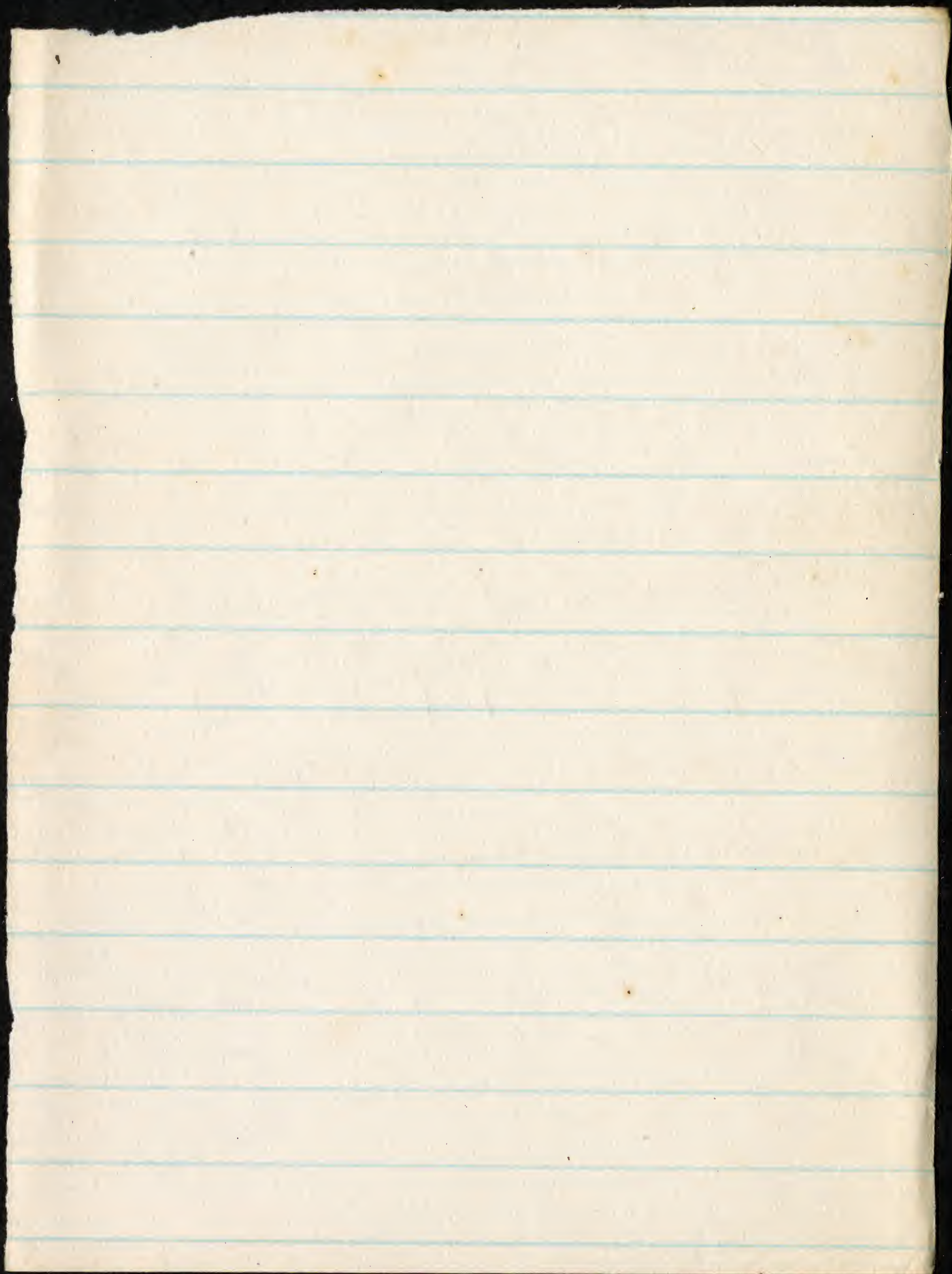
One seen by A in forest.

24 Weasel

a dark weasel seen in the
field. + another seen by A as
it broke out of his trap

25 Bat (Large P. laurum)

The large bats flushed from a cave
grave by A.



Prunna. Border of Nam Tung River

The valley is narrow & rather deep & forested everywhere except open clearings near the road & on some side hills high up.

Elevation 1700 feet of valley floor. Hills range from 8000 feet on west side to 5-6000 on east. Soil a hard red clay except near rivers & rice fields where it is black.

Forest evergreen trees but no conifers. Huge largest trees, laurels common, producing nut-like fruits. Cacias & acacias also common. Giant baobab abundant in forest. Small vines make travelling in undergrowth difficult. Many vines ~~are~~ covered with thorns. No oaks or rose family trees seen. Ferns of large size common in undergrowth. A Maiden hair fern seen & a few giant probably also in

forest. A low lying shrub or tree
few in blossom in March. Tall
cane grass + sword grass
cover most of the open country
+ this becomes dry in March & is
burned off by natives to make
pasturage. Rock formation
limestone, the crevices cavernous
& often disappear. In places
the country is ~~filled~~ shows
large sinks or basins having
no outlet into which water
drains. Vertical holes six inches
in diameter & 2 or more feet deep
going straight down are common in
forest & grass country & are doubtless
the work of ants.

Birds of Burmese Border ^{Thamung} River

1 Jungle-fowl -

Seen in small parties ^{of two} daily, in rice fields, often seen on paths in jungle & often heard crowing in jungle cover. Wary & much hunted by natives. Several collected.

2 Francolin -

A few seen in rice fields & heard calling in morning. One shot.

3 Bamboo Partridge -

Several seen in forest, ^{live taken}

4 White throated Gallinule -

Seen near creek side, one collected

5 Mountain Plover -

Common in fields.

6 Pygmy crow

Abundant in trees at camp

7 Raven - Seen at camp

8 Magpie (black & white)

A few seen at village

9 Kite (brown) common.

- 10 Crested Vireo Abundant
- 11 Black & white Starling - A few seen
- 12 Golden dog-cock - one shot rare.
- 13 Wood cock - A large species trapped
- 14 White & black Hornbill -
A few seen, 5 or 6 shot.
- 15 Trogon
Two collected in forest. Others seen.
- 16 Black Fronted Flycatcher
common.
- 17 Black & Blue Wood Flycatcher
one trapped in forest.
- 18 Yellow-bellied Flycatcher
a few seen.
- 19 Black cross pheasant.
3 trapped
- 20 Purple thrush
2 trapped near stream.
- 21 Bronze-black Several seen.
- 22 Parakeet - small
one collected.
- 23 Blue Warbler - One taken
- 24 Green Flowerpecker - Common in forest.

→ March 5 add ←

- of the red-stemmed fig trees with broad leaves were seen in the forest but no animal appeared to eat the fruit now.
- The Mohawaden Shan hunter shot a ♀ Muntjac today. A shot a pyg Gibbon & saw one other. Yesterday he saw two Rafflesias climbing one another thru the trees. I met a small covey of bamboo partridges in the forest where they were scratching in the soft loam. They never leave the forest for the rice fields and do not gallinaceous birds of the area.
- The forest of the hill is charming all the season. There are no annoying insects & the trees give a cool shade. The under shrubs are annoying only on the more open spots which are overgrown by long grass. The trees are evergreen laurels & figs chiefly but in habit are like our oaks & alders. The soil even on steep hillsides is a loose reddish loam & moist although we are some 1000 ft. above the sea level which is limestone.

Books Wanted
Land of Blue Poppy
F. Kingdon Ward

River ~~and~~ of Golden Sands (2 vols)
Capt. Gill

Yun-nan - Link between India
& Yangtze, H. R. Davis

Marco Polo's travels
with maps -

Chinese Dictionary
Hillier ~~well known~~
English - Chinese

Tonkin to India
Prince Henry of Orleans

Roy. Geogr. Soc. Suppl. Papers Vol I
Part 1, pp 18 Baheer

Voyage in Yun-nan
G. Courtellemont

A Naturalist in Western China
Ernest H. Wilson (2 vols.)
Doubleday Page & Co. 1914

name of camp ^{14 days} Man-bah
March 6) We continued our
hunt for old & gibbons but
without results. I located a herd
by their wailing notes at 10 A.M.
but they were timid & sneaked
away altho I approached the
trees they were in noiselessly
& moved only when they called so
as not to be heard stalking.
Their notes are quite variable
when nearby & clear like rather
than a wail. As I was leaving
camp in the morning I shot a
fine & jungle fowl. A row of
monkeys along in the which
was caught in one of my rat
traps set below camp frightened
Ji-wi so that he did not bring
it to camp & in the P.M. when
I went out hunt the
place traps & snakes were gone.
⑦ We moved camp ^{from Man-bah} up the
valley over the back trail &
crossed the river & have
camped across the clear
where there are many
villages. These people are not
decorated by tattooing & have very
broad platyrrhine noses with the

nostrils directed outward &
very wide. Their legs & hands
are also large & ^{strong} fingers in
features generally being
different than those. Near
our camp where many
gigphus trees bearing ripe
yellow fruit which is
edible & monkey natives
enjoy. The tree has spines
but dark shiny leaves & the
brown ^{or} ~~out~~ in appearance.
None of the natives here eat
monkey meat altho some of the
hunters have shot specimens
for us. The skins I have not
seen in use here either but
the monkeys are quite wary
& difficult to approach so they
are probably shot at often.
In weeks hunting the gibbons
became so wary that they
could not be approached without
exercising extreme caution.
⑧ Went out the day after
Peyton but without result.
A went out during night & saw
saw no game. I could get
no one to show me where the

monkeys lived so I remained
in camp being afflicted
with ~~an~~ indigestion. Weather
hot & clear with a cool breeze
up the valley from the west.

- ⑨ Just before leaving Hui-
pen I took a walk near
the River side & saw about
a dozen jungle fowl in various
openings. With the 22 I shot a
fine cock from a bamboo ~~nest~~
on which it perched when I flushed
it. Our road led back along the
Nam-tung river nearly to
Man-ba & then out of the valley
& over rolling hills. No game
was seen or monkeys heard. The
hill country is cultivated
without forest except a few
patches of brush. The only water
we found for tiffin was a
foul green slime pool used
by buffaloes as a wallow. After
tiffin we went on 2 hours & found
thick open newly brown grass plain
with large sink holes into which
the water drains. The rock seen
was beds of gray limestone. At
5 P.M. we reached Mo-li-hing.

(At Ma-li-fo we first learned from
Elvie that the U.S. A. had broken off
diplomatic relations with ~~Burma~~
some time after crossing one of
the stone Burma boundary
monuments. Ma-li-hing
is a Chinese settlement all
the women having bound
feet. The land is now at
this season planted to
poppies in bloom. The
blossoms are large white
3 inches across, occasionally
there are lavender blossoms
seen. The ~~opium~~ aspect from
popping plants we have seen
The opium grown here is
laid out across the border into
China. No custom house
or British government office
were seen on the boundary.
The British have evidently
moved the boundary into
Chinese territory in recent
years. Davis Map has
Ma-li-hing well inside
Chinese territory while now
it is some miles inside
Burma. Here at Ma-li-hing
we again found only a small
hole in the poplar wallow as a
watering & camping place.

⑩ In the morning we continued our way to Ma-li-pa where we learned a British officer was stationed. The route descended down a narrow valley & then ~~over~~ dry freshly grass down plain. Ma-li-pa was reached at noon. Here we were met by Capt. Clive who gave us tiffin & a camping place near his house & barracks. He is stationed here with some 50 Hindus of the Surba tribe chiefly infantry with one old muzzle loading gun & a herd of pack & milch riding horses. The station here is temporary & occupied in the winter until May when he returns to the main station at Lashio.

⑪ Upon our arrival yesterday Clive sent out a heliograph message to Lashio as the head of the district could only give us permission to return to China or leave the Station. No message concerning us was received however. The Captain showed us the heliograph

in action. The apparatus is a simple one consisting of a small circular mirror 5 inches in diameter & a button to flash it like a telegraphic sender. The flasher represents the dot & dash & the Morse code is used. The stations are 10 miles apart & 6 of them are needed to reach Lashio. The one nearest Ma-li-pa is on a mountain top & the flash gets the mirror seen plainly when they are sending. A few yards back out of the line of sight the flash is not visible so that an enemy could not read it. In hazy or cloudy weather no message can be sent. On clear nights a large reflecting light with a shutter is used for signaling.

(12) Pea fowl are said to occur here at one spot 3 miles west but Chie has never seen the birds. I went out at

3 P.M. with a guide & Li-wi^{to}
the Peafowl haunts. The place
was a narrow valley filled by
rice fields & forested on the sides.
While we were watching the fields
large olive nungwooses were
seen walking along the edge
one after the other. They finally
saw us & disappeared into
a ditch before we could get
within shotgun range.
The only game we saw were
several gumpheas & many
large squaretailed doves.

(13) In the early morning I went
again to the Peafowl place
but saw none although
shrill call was heard like
that of a domestic peafowl.
Many francolin were heard call
in grassy plains & several were
flushed. A giant black leg
cock was shot & one francolin
& a harpy eagle.

(14) This morning in bright sun-
shine at 8 A.M. I saw a pair
of large pale cats on a small
rice field. They ran up a small
path in the grass when we

appeared & got away without
harm from my shots. Later

I shot a large golden log-cock,
a Chinese jay, a green-race
white crested thrush, a green
wood pecker, & several species
of bubbling Thrushes. A shot
button quail, a jungle hen
& many birds.

(15) Finally word was
received from headquarters &
permission to leave granted
us through the French Governor of
Rangoon. This was another
market day at Ma-ho-pa
the interval being 5 days
which is usual here in this
country. The residents at
the station are Chinese engaged
in opium raising & getting
wealthy thereby. The natives
are Shans chiefly with some
Palawings & a few Karens. No
Burmese live here or the border
anywhere says Ching. The
natives wear with bright colored
dress were Shans he says.
No monkeys were seen anywhere
near the station, only on the

border. At 8 am after breakfast
with Chive we took the ~~road~~
• Ma. li - liu road running N.E.
to another ~~hill~~ ^{hills} ~~of the~~ name.
We passed many natives
• coming to market with loads
of grain, vegetables, etc.
Capt. Chive says that serow &
mountain occur in the hills
• but he has never heard of tigers
or leopards near the station.
Sambar are lacking as are also
monkeys of any sort. Altitude
of station 3600 feet. Rock white
limestone weathering gray. Soil
bright red clay. Rainy season
• starts middle of June & lasts
to October. None of the natives
of Burman territory are allowed
• to carry guns as in Chinese
territory where every traveller is
armed. Chive told us he took
the guns away as soon as he located
• them. The name Ma. li - liu
applies to a large species of tree
One of these trees with spreading
crown & dark green leaves took near

our camp. The bilobed leaved tree so common below Chien Kham is now in blossom here in abundance. It has large ~~red~~ white fragrant flowers in shape like some orchids, ~~but~~ ^{and} is not a member of the Leguminosae as I had thought. After climbing thru a pass to an altitude of about 6000 feet we skirted the ^{mountain} side to Ma-li-hing where we camped at 5000 feet apparently. The village is located on the mountainside with a deep narrow valley below it. The tree growth is tropical without pines and a few oaks & alders. The boundary was crossed two hours out of Ma-li-pa but no masonry monument or mark was seen on the road.

(16) Night pleasantly cold. The country everywhere here is much broken & mountainous with only small narrow valleys suitable for rice ^{terraces}. The valleys & ridges run in ^{various} directions & the country is confusing.

at dark we reached Meng-peng
a village of some size with
rather large plain rice
terraces. The hillides here
are all without forest & are
now grass covered, the grass
recently burnt. It appears
to be a poor game country &
also unsuitable for small
mammals. I was never seen
& a few francolins heard
calling.

(17) The road after leaving
Meng-peng passed up the
valley & over a high ridge to
the west & down into the
Salween gorge. The road
~~has run~~ on the ridge ran
between weathered gray limestone
& brown grass covering
small fields of wheat. The soil
was brown or blackish & not
red as usual. On the mountain
were alders & a few oaks &
on occasional preserved grove
of common pine. A Chinese
village partly down towards
the Salween contained some

very small woman, some only
3 feet tall but well or stocky
in build. Two species of small
primroses were seen on the
way which had heads of pink
blossoms. A steep descent
of 2000 feet brought us down
to the ferry on the Salween
which is here a quiet stream,
100 yds wide & very deep.
The sides of the valley are
steep with only narrow patches
of alluvial soil bordering the
rivers. We made camp at
the ferryman's hut on the east
bank, where there were old
rice terraces & level land.

(18) The country looked favorable
for collecting so we decided
to set out traps. The boatman
said muntjac, otter & peafowl
occurred here. The ferry consists
of a long raft of bamboo poles
lashed together by vines & bark.
This structure is propelled
by shovel like oars which have
a square bamboo frame & are
pulled back toward the boat like
a snow shovel which they resemble.

ble in shape, Poles are also ^{used}
when near the shore but the
● depth a few feet away from the
bank is ^{too} great for poles. No
rapids occur here. The stream
● has a current of only about 2 miles
an hour. The water is clear
+ cold, 60°F at night. The rock
formation is largely black slate
● + slate with some limestone
+ the soil on hill sides is
red clay.

(19) The bat traps produced
only 2 species of large flying
like those already secured
at Manbo. The olive or red
bellied squirrel of Yunnan
● was also common here.

(20) I went per. gun shooting
down the river with A. We saw
an old ♂ on a sandy point at
● the edge of the bush but he got
away at 150 yds + we saw
him no more nor any others
altho we waited ~~and~~ from
● 5 P.M. to sun-set. Pekfoul
cald daily on the west side of the
river during the cool morning
again at dusk. Whenever we

fire a gun they also call which
is a habit of domestic peafowl.

(21) The old ♂ was seen again
today on the point. A was
waiting behind a bush for pea-
fowl & I at a distance of some
saw this old bird get up on a
large rock on the open rock
look at A's position & then
turn around & sneak away
unseen by A. It was a plain
case of the ~~stalker~~ ^{being} stalked.
I shot an adult ♀ which flew
over my head & alighted on the
beach opposite me. As she
alighted she noticed me under
some trees 25 yds away & started
to fly but I brought her down
with a shot wing broken.
Then she made for the water
& we picked her up in the water.
She was ^{respected} green with a large top
not & looked like a immature
but she contained a series of large
eggs. The peafowl inhabits
dry leafless bush here & call
daily but only at daybreak & at

seen - set do they come down
to the beach. There are 3 or 4 of
in this neighborhood but only 7 of
them have been seen there for.
The Chinese don't hunt them
here but they are very shy
nevertheless. The flesh &
especially the gall is said by
the Chinese to be deadly
poison & the gall is employed
to poison people, or is
dried on the fire & roasted &
found it much like turkey
in flavor, just as dry & white
& quite indistinguishable.
The tail feathers of the 8 are
of value to the Chinese for ornament
I bought #10.00 Mex.

(22) This morning I saw
a band of 20 Macagass
monkeys but they did not
allow me nearer than 750 yds.
They were on the river margin
in scrub & leafless trees. The
valley of the Salween is quite
without residents as the climate

to malarious in summer. The
rice fields are cultivated by the
villagers of Chanyang-hung
which lies 2000 feet above the
river in a pine forest. There
are no native tribes here the
people speaking Chinese
only altho in features they
show Chinese characteristics.
The Salween in depth & shape
is identical to that of the Mekong
in the same latitude both being
deep V shaped ~~affairs~~ valleys
with no level floor of ~~any~~ much extent.

(23) The night was rainy & hot
& the morning dawned rainy.
At 8 AM. I went down the River
to the peafowl haunts & saw
two, the wet weather being
favorable to them. The first
was met on the open sand
bank where I shot the ♀. This
bird was an old ♂ & I did not
see it until it flew up
back of me with loud beating
wings. I fired at it at 78 yds.
but the shot had no effect.
This bird I ~~found~~ ^{discovered} by its tracks
was within 30 yds of me at

one point but apparently played
• me to pass as I was looking
forward to the scrub away
from the river. After I had
• passed well ahead it flew
up & was out of danger. The
• ~~rest~~ other bird I saw a few
100 yds further down walking
• along the open sand & rock &
black which it followed for 100
• yds sitting on the time. It
an exposed rock beach & could
not move to stalk the bird
• did not get a shot. This bird
was seen at 10 AM. In the
• evening I again returned
to hunt sea fowl at 5 P.M.
but saw none altho the sky
was partly overcast, as I
• was shooting at bats on the
river side I heard a splashing
in the water opposite & saw two
• animals swimming side by side
& enjoying the water. Meanwhile
• They came to the beach finally
& left the water when I saw
they were a pair of red turtles. It

was too dark to see in fl.
sights well so I stalked
close when one returned
to the water & the other walked
away on land & was not
again. I was surprised that
they paid no heed to the
noise of hot shooting. The
had evidently just come
down to the river at this point
for a swim.

(24) The day broke misty but
without rain. We broke camp
& crossed the river on the
bamboo raft which made
six trips to get the 25 loads
over. The mules & horses
swam over in a close bunch
& landed well up the river
being strong swimmers.
It took us 2 hours to climb
up the very steep sides of the
valley. At noon we stopped
for tiffin ~~at~~ amid a pine
forest at about 5000 feet.
At the summit of the valley
since the country was rolling
& mountainous in every

Mammals of Channing. Landing
Salween Ferry.

1 - Macacus -

Several herds seen on the river margin in trees & scrub. The individuals mixed ages & sexes, from 12 to 20 individuals. They are difficult to stalk within shot-gun range.

2 - Brown Bat. (*Eptesicus*)

Several shot at dusk near camp in open country.

3 - *Myotis brown Bat.*

Like last in size but teeth smaller. One shot.

4 - *Cervulus* -

Several heard bawling at night & in the morning near camp. A few tracks seen on ~~the~~ wet sandy river beach. Long tails seen on grassy hillsides.

5 - *Canis* (red wolf)

A pair seen prowling in river at dusk. Tracks of dogs seen on beach made by these wolves. Doubtless.

6 - *Viverra* -

A pole cat seen running on an overhanging limb or vine in forest at river margin.

Elephas no evidence past or present
Country not suitable
Rhino - no evidence

7 Squirrels (Red bellied)

Several seen in trees at
camp. 8 collected.

8 Squirrels (dark bellied)

Several collected in edge of
rice fields.

9 2 (white bellied)

Not the last in occurrence.

10 Micromys

A small white bellied species
seen. Rare.

11 Pachyura (large)

Three caught on meadow
land.

12 Loris

Often are said to be seen
in the river by the boatmen.

13 Pteropus

always last seen at dusk.

14 Bat (medium size)

Often seen at dusk.

15 Civets

Tracks seen on beach.

16 Felis - bencata?

Tracks of small cat seen on beach.

Trees of Salween Ferry.

1. Figs - large trees on river bank with elliptical leaves & red figs produced in bunches on trunk. Tents pitched under one of these widespread trees.
2. Cat claw creeper. Pinnate leaves & climbing bearing vine on margin of fields & river.
3. ^{pink} White flowered pea like ^{tree} flowers. Rhododendron
Abundant in forest & in full bloom giving a mass of pinkish white in landscape.
4. Maroon flowered Walnut ^{tree}.
Seen on edge of fields in blossom.
5. Erythrina -
A few trees seen but rare.
6. White flowered Walnut Tree
A few seen in blossom on crests.
7. Purple pea flowered Creeper.
The same creeper bearing dense clusters of flowers seen in forest.
8. Golden Acacia (in blossom)
A shrubby species common.
9. Spiny Jugate Apple
Seen in fruit near river everywhere.

10 Solanum (yellow fruit)
a shrubby weed in a low soil.

11 Jessamine -
common flowering shrub

12 Red flowered shrub. Tubular.
Common near river.

Description general

Valley deep & V shaped
about 3,000 feet in depth.
Rock on east side limestone on
west bank shale chiefly. Soil
red clay or shale gravel with
yellow clay.

Climate cool in March.
Morning calm, afternoon with
good breeze up river from 1 PM
to sunset. Nights clear & calm.
No original forest seen, only
a few trees at riverside & a
scattered growth of spider
trees on grass covered hillsides.
West side little cultivated & forest
here acacia like trees, thin &
tall. Very little bamboo or
moss grass seen. Chiefly
a tall slender grass 3 feet high
on hillsides.

Birds of Salween Ferry

1. Pea-fowl { Kuhn - chah (Chinese)
soon (Shan)

- Seen on west side of river on beach but ♂s only with exception of one ♀ which were nesting near ♂s call at daybreak + at dusk + whenever a gun is fired. Shy + very alert. When frightened on beach they take wing but in bush they run + keep in cover. Not seen in trees but they doubtless roost in them.

2. Pheasant (Lady Amherst)

One skin dried for sale by natives.

A white ruffed pheasant seen by

A once only at close range.

3. Jungle fowl (Yeh-che)

Abundant in rice fields +

river side. Many cocks seen

- in flocks by themselves.

4. Francolin -

one heard calling + one flushed.

5. Purplewood Pigeon -

Two shot in trees. Not common.

6. Sharp tailed dove

Common + nesting in trees.

7. Crows - A large flock.

- Species seen on river twice.
- 8 Kingfisher (little blue)
One only seen.
 - 9 Lapwing -
A few seen on river.
 - 10 Sandpiper -
A Pectoral species seen.
 - 11 Black & White Wagpie -
A few near the camp
 - 12 Raven
A few seen near cultivation.
 - 13 Bee-eater - golden headed
Abundant & audacious
 - 14 Bee-eater - Green
Several seen in fig trees
 - 15 Barbet - large
Two shot in fig trees.
 - 16 Black-headed Sparrow
A few seen.
 - 17 Red-headed Vireo
Common in trees.
 - 18 Babbler - Slaty
Two shot in bush
 - 19 Sunbird - Red
A small species seen.
 - 20 Kinglet - olive
Common in trees.
 - 22 Crested Bulbul - very common.
- Storks, geese, herons, rails wanting & only
one kingfisher seen.

direction. The Salween trough
could be seen far down toward

- Brown were some small rapids
were in sight. Everywhere was
cultivation in patches & second
growth scrub but no original
forest anywhere. At last
we reached Pienka, a series of
Chinese villages clustered on the
edge of small rice plain or valley
about 1 mile wide & 4 miles long.
No native tribes were seen
anywhere on the route. The Chinese
occupying the land exclusively.

25) The night was pleasantly
cold quite anti compared to
the low Salween valley. Our
route continued up the
long narrow Pienka valley
which has a length of 6 or 7 miles
we then turned to the west &
climbed out thru low hill
covered by scrub oak & chestnut.
In places Rhododendrons trees with
white blossoms made a great
floral display. These flowers
are in general like the Asplen
blossom trees of the Salween Ham
Tung which is doubtless a
Rhododendron also. On the

road cuts gray or whitish
granite now exposed the first
rock of this sort I had seen since
coming south. At 1:30 P.M. we
reached a stream situated in
a deep ravine amid newly burnt
grass lands & here we camped
as A was down with the malaria.
The grass was just sprouting &
a new crop of Pteris ferns a brake
which are all thru this region
dominate over the grass.
The natives gather the new
fern stalks & boil them for
food. I tasted some which was
rather glutinous & spinach
like in taste. The camp
was about 5 hrs. from the small
village of Nang-sai. No sign
of game mammals or birds
were seen here. At the creek
flown past camp a new stone
bridge of white granite had
been built, the rock taking
at the creek side.

(26) A being recovered from the
malaria we continued our
journey & arrived at Nang-sai

for tiffin. This is a small village
tucked away on a hillside
● around the mountains. The
country along the route is very
mountainous & bare of forest
● being burnt over for grazing
each year. No birds or mam-
mals seem to dwell here ap-
parently being exterminated by
the annual grass fires. Early
● in the afternoon we reached
Hsing-ta village (elephant foot)
a typical filthy Chinese village
situated on the edge of a wide
irregular valley of rice terraces.
At this place we made camp.
● There was a hot spring, the hot
water bubbling up around
the ^{cold} water of the valley stream
in granite boulders. The
village women use this
● place for washing clothing
& bathing. The water is as
hot as the hands can stand
but is not unpleasant. It
● deposits a sort of lime on the
granite rocks. The Chinese here
were extremely curious & troublesome.
They gathered about our camp

in great numbers + stared
at us + every object we possessed.
They could not be driven
away.

(27) From Hsuan to we
journeyed to Lung-hing in
seven hours. The landscape
remained the same type as
previous days very hilly +
broken the road dropping
down into many steep ravines
with small creeks in the beds
+ ascending again, ~~at the~~ there
being no level stretches.
At Lung-hing the magistrate
told us there was fighting
at Mong Shih, a large Shan vil-
lage 1 day south where we had
intended to hunt game.
The Shans are here raising
opium + fighting the govern-
ment troops who attempt
to stop them. On this account
the magistrate could not let
us go there so we turned
northward up the Shweli River
valley to the high pass on the
Salween divide on the Teng-yueh
Yungchang road. The night was
cold + the climate here quite

bracing

- (28) Our camp at Sung Jung was on a fine grassy meadow west of town and in the morning our route lay thru the town which is strung along this one long road. It is a typical filthy Chinese town with Shans or other tribes being purely Chinese. The Sung Jung valley is small & irregular Incheon crossed it & ascended the bare hills. The route was a paved road leading to Jung Chong. South of the road on one of the spurs we could see 2 miles away a temple picturesquely perched on a sharp conical peak which was well forested the trees hiding the lower walls of the building. The roadsides about Sung Jung are lined by rose hedges which are now bearing single yellow flowers of sweet scent. This is perhaps the ramblers rose of Wilson Chinese flora. The pear trees are now in white with blossoms & the few peaches are also pink with flowers. A few pink primroses & a carmine rosaceous flowered shrub ~~and~~ bearing

Crataegus like Crataegus is used as a
hedge plant is also in flower.
In the afternoon we reached
a valley on the sides of which were
numerous Chinese villages the largest
being Cha-an-so, ~~there~~ a place
nearly as large as Jung-hing.
One of the villages was a pottery
manufactory, great numbers
of conical white pots being in
view. We made camp at the
lower end of the valley on a fine
grassy slope. These valleys
look quite desolate now being
a series of dried up rice terraces
without any vegetation or crops
growing. The usual crop of rice is
grown here & this is not yet planted
& the fields are left idle all
winter quite an unusual in
this China. The creek is a broad
shallow one & flows into the
Salween ~~end~~ of the valley.

(29) The night as usual at
5000 feet was cold. At this
point we left the Jung-chang
road & made straight for the
ridge bounding the Salween on
the west which we followed north.

Hsing-Chen - new city,

At noon we had tiffin ^{amid} ~~under~~ the
● pines under a pear tree in full
bloom. The country ^{on the way}
was a series of deep valleys & ridges
● but cultivated vertically as usual
& no extensive forest left. After
tiffin we dropped down into
the Salween valley filled by
● smoke & haze. When we entered
the valley it is very wide, 10 miles
but the surface or floor is a rolling
sea of red clay hills. The wideness
continues as far as Ho-mu-shan.
A few Shans live here mixed
in with the Chinese. These Shan
women wear great cylindrical
● turbans as high as the bear skin
caps of British guardsmen. Their
dress is of black cloth & their feet
are bare in marked contrast to
● the bound feet of their Chinese
sisters. We camped beside a
village of mud walled houses of
Chinese type but the place is
● governed by a Shan chief who
has a mod of shooting game &
was very friendly. This village is
Hsing Chen (new city). This place

altho large is not on planis map.
neither is the road or any
other place west of the Salween
between Chai-an-so + Ho-mu-
mu.

(30) The day was spent on
a wild goose chase for a
shooting camp altho the 1st
of April was still 2 days in advance.
The Shan chief Hsing-chen sent
two soldiers as guides to a place
he said was good hunting but when
we arrived we found it in deep
ravine one side of which for several
miles was clothed by dense
primieval forest growing on so
steep a slope that the Chinese
could not cultivate the land
& had allowed the forest to stand.
This spot was high up on the rim
of the Salween valley 3000 feet
above Hsing-chen. We
descended from here & found
ourselves near our starting
point at darkness, but on our
way to Ho-mu-mu. The
rock formation is largely
granite in this range with some
sandstone & shale. At this

season the walnut trees are just
leaving & they form the chief trees
in the landscape near villages.
We met quite a few Shans on
the road going down to Hsingchen
to the market but most of the
farmers of the region are Chinese.
This is the poorest reptile country (Salween
valley) considering its tropical nature
& dryness I have visited. The Salween
is hot & dry with plenty of cover &
rocks but no lizard is visible
along the road & snakes are never seen
nor are their tracks met with in the
dust of the road. We have in today's
work travel secured one snake &
& lizards only.

- (31) The route was continued in
the early morning. It led
down into the valley east of
the Salween not far from Hsing-
chen & then went north to
the main Yung-chang Tengyueh
road. The bridge over the Salween
was visible most of the way.
● It is of two spans & suspended
the two parts not in line but
broken at the middle where the
Salween valley continues wide

far above the bridge as far as
we could see. The weather
has been continuously hazy so
that not more than a mile
distance is clearly visible.

This haze remains permanent
or at least nearly as dense at
sunrise. We climbed out of
the valley again to the ^{small}
village of Ho-mu-shan 6000 feet,
situated on a spur with a few
vertical farms surrounding
it. Near our camping place at
the village I saw considerable
rabbit dung but the villagers
assured us the rabbits occurred
here only during the rains. At
dusk I shot several brown *Thryothorus*
about at camp.

April 1st proved to be a foggy
day for us. In 2 hours made
up the Teng-yueh road we
reached a small village where
the inhabitants said monkeys
were to be found but a dog
not like the place & moved
on over the pass & at noon
we found ourselves out of the

- pass + the range of mountains.
 There was nothing to do
 but return to the village
 as there was no water at
 the pass or in the forest below
 it where the monkeys
 lived. We pitched camp
 at the roadside a mile
 above the village which
 was our only water supply.
- ② In the early morning
 we heard monkeys calling
 which by their notes we
 suspected were gibbons &
 this later proved to be
 the case. The gibbons here
 are uniform black in the
 ♂♂ and brown in ♀. They
 are larger than the Nam
 ting species but their call
 notes are similar but disting-
 uishable being less prolonged
 that is more of a series of
 barks or whoops. One
 rat trap caught the long
 tailed Tupia like insectivore
 of the longtailed genus
 of the same place
 & the longtailed *Peromyscus*

of the Snow Mtn. region.
We left for Teng-yueh
for our mail which has
been held there for 2 months.
(3) A new species of the long
tailed sort but large bodied
added the only new mammal
today. The gibbons called in
the morning & A saw one
in the forest below camp
during the night we had
a heavy rain with wind
which flooded our camp.
This is the first shower for
several weeks here as the road
was heavy with dust where we
arrived. The whole region
here is granite but exposed
rocks are rare except along
stream cuts. The road is paved
with granite some 5 feet wide.
The forest is made up of
live oaks & laurels, one
of which has produced a large
rough peach pit nut with
an olive exterior. Acorns are
the most abundant nut
however. Rhododendros
are not rare, the large flowered
carmine ~~one~~ is now in

full blossom. There is also
a very cream white ~~open~~
flowered species with a heavy
perfume like a wagnolia.
No figs or palm occur here but
bamboo is everywhere the
commonest forest undergrowth.

- (4) The day was clear & calm
all morning the heavy
wind not beginning until
afternoon. A shot an old
♀ gibbon of large size but
brownish. He said to shoot at
several large black ~~as~~ ⁱⁿ
trees on a steep sided ravine.
I went out with a Liso
hunter who carried a cross
bow gun with stinging darts.
He was dressed in Liso
leggings & short ~~wide~~ ^{loose} breeches
pants much like the English
of India wear. His feet were
bare & on his head was a
turban ^{made} of a blue cloth twisted
about his head in a rope like
roll. He carried my rifle &
his cross bow on his back.
Just on leaving camp we
heard gibbons calling below
camp & we descended in

search of these. We located them by their call but when under the trees they were in our movements frightened them away. I saw the crown of a young hand & foot swinging from the trees at a fast rate too fast for our run to overtake. The black & sh. sp. was later at 150 yds. but he bolted out of sight in a few seconds before a shot could be obtained. No more were seen or heard so we returned at 10 A.M. to camp. Just below our camp is a clearing in the forest where a Liss family have under cultivation potatoes, late corn or maize is planted in these same fields & forms their chief crops.

(5) Today I was lucky & shot a black & gibbon which I discovered clinging motionless to an upright tree branch in a leafy tree in the dense forest below camp. There was another gibbon with this one but it got away unharmed as I was

shooting with the rifle & had
took several shots to bring this

- one down. It was a half
grown ♂ with the canines
not yet protruding beyond
the other teeth. The stomach

- contained seeds of a yellowish
berry & purple pulp of another
fruit & a green leaf pulp.

- These 2 gibbons were quite
noiseless & it was only by
chance I saw this one.

- ⑥ No gibbons were seen by
either of us today although they
called in the morning. I

- shot a fine ♂ silver pheasant
in the forest, the first we have
obtained. This one flew past

- me & I shot it on the wing.
Circulating round another ♂

- was seen not far away standing

- on a small tree trunk & I fired at

- at him but he flew away

- unharmed & I heard him

- calling later. There was one

- here & there few crows which

- were rivals I suppose. The ♂

- makes a cawing chucking sound

- rather peculiar.

- ⑦ No gibbons were secured.

seen. Set ~~set~~ traps down
at the creek side ^{below} camp
+ caught 3 species of shrews
a short tailed *Sorex* a long tailed
silvery *Sorex* + a large *Pachyura*.

(8) This was our last day in
the camp which was broken
at noon in a driving rain
storm. I took a long climb
thru the forest + just as we
were turning to descend
the gibbons called nearby.
We stalked these by their
notes which they uttered at
close intervals until we
disturbed or sighted them.
Their notes were varied. The
long drawn out wail was
uttered in consort by the 2
black males but before these
loud notes were uttered a low
bawling wailing note was
always uttered. We stalked
them very carefully as they
are quite shy + advanced only
when they were calling so
they could not hear us walking
on the leaves. Finally when
within 40 yds I saw a large
black ~~do~~ but only his body the

- head being behind a large
branch. I fired BB shot & he
dropped to the ground. His
companion moved away
hand over hand ~~as~~ swiftly
& then stopped at 100 yds to
look at us & bark a call
for his companion. On
skinning the other I
was surprised to find
only 2 shot but struck him
one in the abdomen which
lodged against the stomach
wall & did no damage &
the other penetrated the shoulder
& broke a rib & then entered
the lung where it caused a
hemorrhage which choked
the animal & filled up the
whole chest cavity with clotted
blood. He died within a few
seconds as if shot thru the heart.
His stomach contained
chiefly green pulp of leaves
with some of the red forest
berries & a large bird print
bits size of a small olive. I
saw near here a pair of Bantam
partridges & shot one, also saw
again the ♀ Silver pheasant &

heard the I calling. Then we descended for down the canyon trip the other side to our old camp. The country is very steep & the rock formation is gray granite. Where we crossed the creek was a pretty water fall 100 feet high falling over a series of a dozen steps made by giant granite ledges. The first I used as guide carried some primarions smeared with black poison gum & placed in a bamboo tube for safety. This man occasionally imitated the wailing call of the gibbons by pressing the edge of a green leaf against his mouth vertically blowing. This imitation however was never answered by the gibbons. At camp I found a soldier waiting with my horse. On the way up the pass just near the old gate at the summit I shot a fine bloodred Trogon which was standing in the road. The ~~the~~ throne was furnished by

- with a long blue pendant
yellow neck of brilliant blue
rumpled by black cross bars
- This mark resembles the
Chinese character for longevity
+ the bird is called by this
name (Tsu-che). This
 - considered very lucky to
shoot one of these birds. I
reached camp at 4 P. M. at
a small village called
 - Ta-hwa-ping which is
on the new road to Teng-
yueh, the old road which
went thru Tai-ping-pu
being longer & disused now.
Here we were surrounded by
heavy forest clothing the hills
 - + the place looked favorable
for mammal collecting.
 - Our catch of small mammals
was only 4 specimens + 2 species.
 - At dusk I saw a large Pallas
or else a flying squirrel in a tree
where I was watching for
bats. It rained hard at
noon & remained overcast
all day. In the P. M. when
setting traps in the forest I
encountered a large herd of gray

semnopithecus monbeyp. They
moved away rapidly & I
failed to hit any at long range
across a ravine where I first
sighted them. Some of the
♀s had orange color young
clinging to their bellies.

(10) It rained hard most of
the night & in the morning
showers continued up to
noon. My traps contained
only 2 Olive insectivores
& one mouse. On the trail
well up in the forest we
encountered the gray apes
again. I was accompanied
by a local Liso hunter
with his two dogs & cross
bow gun. The monkeys
showed little fear of the
dogs but when we came
in sight they moved
away thru the trees with
much speed. I fired once
at an old ♀ & dropped her & then
ran after the fleeing troop
but got no more close shots.
When we returned to the ♀ a
half grown young one was in.

- the trees quickly by her offspring
but it vanished before we got
near. The rain + mist were
thick at this time but we
continued thru the forest +
descended toward the creek.
Here we met the apes again
+ I shot an old ♂ + a half
grown yg before they fled.
The stomachs of all 3 apes
contained only green leaf
pulp and no seeds or
berries. In the evening
or dusk I watched for
squirrels near the village +
finally saw one of the
great flying squirrel
+ sail down across an open
meadow + alight at the
base of a large tree. I stalked
it in the dim light + shot
it. As it flew or sailed it
looked much like a flying
pheasant with its long tail
streaming out behind. A week
to a fortnight with a few +
returned with 28 great mysterio
somewhat like the species he
collected at Yenching.

⑪ We had another wet day with intervals of sunshine. At night there was hard rain + in the morning low mist + quiet rain. I secured another *Sammopithecus* on the same ridge as yesterday. The Liso, an army of boys + men armed with blow guns brought in a fine large *Muntjac* which they had shot in the leg with a poisoned arrow. They said it ran quite away before the poison killed it. The poison is a vegetable substance black + tarry in color appearance.

⑫ Today for the first time we heard gibbons calling. They called at 8 AM for a few minutes + altho it was not more than a mile away we could not find them. The country we travelled thru is covered by fine forest of large trees oaks + laurels but no figs. The bamboo here is a very wicked not being armed at each node by a whorl of short heavy spines which prick you

as you wave thru the thickets
or scratch your hands if you
grasp bamboo for any more
carelessly. This species of bamboo
grows everywhere in the forest being
the usual undergrowth.
● attained some 20 feet in height
+ 2 inches in diameter. On
the return to camp I shot a
● new squirrel, a very large
mounted sort with the general
color + appearance of a large
Tupia. He was making
rattling wood pecker like chirp
in the bush + I got within a few
yards of him. Two of the
common red bellied squirrels
● were also secured on the return.
Neither of us caught any
small mammals in
our traps. At the summit
● camp one of my Lisohunters
one day located a bees nest in
a hole in a large tree which
haunted much + was easily
● ascended in consequence.
He ascended + with some ^{burning} ~~smoke~~
smoked the bees, which swarmed
out + buzzed about his head. He

however paid no attention to
the insects & I do not think
they stung him. The hole
however was too deep to be
open by his swordlike bone
which he used to chop the
entrance so he abandoned
his attempt to rob them
of their store of honey.

(13) During the night it rained
hard but stopped at daylight.
No Liso hunters came owing
to cloudy weather so I went
out with a mafu at 8 AM.
Soon after we started it
began to rain & continued
until noon. We tramped
for 3 hrs thru a fine forest
but owing to rain no githos
called & nothing could be heard
~~the~~ morning owing to rain
again. I saw a & shot
pheasant at close range
but shot over him. One
red bellied squirrel was all I
bagged. No small mam-
mals were caught by us.

(14) Yesterday we decided to
leave for Tang-yueh but
in the early morning rain

Mammals of Ho-nu-shu Pass

- 1 Pachyura (large)
Two caught on margin of creek
- 2 Sorex (long-tailed silver ^{new})
Two secured, rare
- 3 Sorex (short tailed)
Two taken on margin of creek
- 4 Sorex (brown)
One only secured
- 5 Insectivore (Tupia like)
Several secured in forest
under logs. Commonest mammal
- 6 Spring Gray Mouse
Several taken in forest & clearings
- 7 Apodemus (long tailed)
A few caught in forest.
- 8 Gray Mouse (long tailed)
A common species in the forest.
- 9 Squirrels (red bellied)
Two secured, only a few seen
- 10 Microtus (short tailed brown)
A few secured, rare.
- 11 Black Hylobates
Three secured, an old brown

♀ + a old black ♂ + a black
yng ♂. Heard daily calling
but only in the morning.
The calling is very irregular
sometimes early + sometimes
late as 11 A.M. The call
is often only uttered for 5 minutes
but rarely continuous for
a period of an hour. The
gibbons are shy + difficult
to stalk altho they are
not hunted by the residents
who are averse to eating
the flesh or using the skins.
Food in stomachs berries
seeds + green leaf pulp.
The old ♀ contained a large
foetus which was still quite
sharable. No nursing yng
seen.

12 *Cervulus*

Saw 2 in the forest +
whether trails were numerous.

13 *Capreolus*

Some dung + tracks seen
in the forest on steep side hills.

14 *Sus* (some dung seen in
forest but no tracks)

15 Black bear (said to occur)

Kept us from leaving until
9 AM. Rain continued &
mist was encountered. after
• climbing out of the forest
we had a long descent then
crossed a grassy hill down
• to the Shweli which we could
see winding thru the valley
far below. Villages with
groups of shade trees along
• them could be seen dotted
the plain. To the north
on the Salween divide pale
green could be seen on
some high peaks much to
my surprise. This is
the 11,000 foot peak of which
• of Davis map I have no
doubt. Our camp was cold
tonight at 7,000 x 11,000 ft. would
hold snow in this season
• It has now rained daily
for 7 days which is quite
a good performance for this
time of year. There is no
• doubt this is the beginning
of the rains. At 11 AM. we
crossed the chain suspension
bridge across the Shweli River.

The valley is a rather deep one like
since the Salween in shape but
less deep & not tropical being
4,000 feet at the bridge. There is
no tree growth near the river
only grassy slopes & rice terraces.
At the bridge the river is bordered by
grassy curved bluffs 100 feet high.
The road winds up the
valley slope through small
villages & rice fields. ~~over~~
The road is a paved one the
block being a blackish slate or
shale the formation changing
at the river where ^{the} granite comes.
The whole afternoon we tramped
over grassy curved hills with
decided forest with out cultivation
only a few small villages altho
^{several} small streams were crossed.
At dark we camped at a
small village in the hills 30
li or 3 hrs from Teng-yueh.
(15) The night was cold & rainy
but dawn was partly clear
with a great rainbow in
the west above the rolling
grassy hills. Our road

Mammals of Tai ping-pu
(Ta hwa ping)

1. *Spermophilus*

A large herd of 20 seen on several consecutive days from which I shot four, 2 old ♂, an old ♀ + a half grown yg. Some newly born orange brown yg were with this herd but the some of the ♀s were accompanied by half grown yg. only. Food in leaf pulp.

2. *Hylabates*

heard calling only once, none seen. The skins brown more dried skin for saddle

3. *Myotis* (giant)

A. caught 28 in a cave all were adult ♀s but without embryos or nursing yg.

4. *Pteropus*

I shot one at dusk by watching a group of trees where I had previously seen one come forth at dark. This one I saw sailing down hill looking like a sailing pheasant with its long tail sticking straight out behind. No others were seen but

The Liso hunter brought in dried skins
5 Squirrels (red bellied)

Several shot in trees on the edge
of the forest.

6 Squirrels (long mounted)

A small white bellied squirrel
the size & color of a Tupia was
taken here for the first time. I
shot one & the Liso another
& I saw ^{another} ~~one~~ on the road as I
was approaching camp but I
mistook this one for a Tupia.

7 Insectivore (Tupia like long mounted)

This was the commonest
mammal in the woods.

8 Apodemus (long tailed)

Several caught in forest.

9 Apodemus (gray)

Like the last in occurrence.

10 Very gray mouse -

Like the last in occurrence.

11 Mole

Runways of a small mole were
often seen in the forest but traps
set in them caught nothing.

- led up over the hills where herds
frumled & horses were grazing.
The Ring-necked Pheasants
were calling ~~on the~~ and
then on the summit the
Teng-yueh ^{plain} valley lay
at ~~some~~ far below in a deep
valley. The villages were on
pinched hill in the valley
& looked like islands and
the flooded rice fields.
Patched & most floated about
in spots among everything
damp & green. The road
winded steeply down the green
hillsides over treacherous
Chinese pavements, the rocks
smooth & set in small
angles. They appeared to be
black limestone or a similar
rock formation. The valley is
about 3 miles wide by 8 long
& every inch is devoted to rice
terraces. We passed thru
two villages & then into
Teng-yueh which lies on
the north side of the plain on
a slight rise. The population
here is Chinese, no native element

being apparent. The Evergreen
+ 2 child above boys has
bound feet in regulation
Chinese style.

(16-21) The time was spent
packing specimens.
Every day the weather was
cloudy & each day or noon a
little rain fell so drying
specimens. It has not been
pleasant. For most the
botanist was here until
Thursday when he departed
on his way to Taliu. His
destination is Salween^{Salween} &
the country west of it, Mekong^{Mekong}
divide. The white flower tree
of the Namting & Salween
is a *Bauhinia* or legume &
not a *Rhododendron* he says.
The lower tropical flora he does
not know only the mtn. flora.
Several times his life has been
in danger during his 13 yrs in
China. At one time on the
upper Mekong near Wei shi at
the time of Yunnan's military
expedition in Tibet, the Tibetans
hunted his party down & killed

all but 3 men out of 19. Some French
men who were with him were killed.

- He hid in the bush for several days & finally escaped southward to Lichiang. The tribes in the villages were unmolested only European ^{the} Chinese servant being killed. Forrest was also in of "Tali" for at the garrison rebellion with Hachima. Both were made prisoners by the rebellious soldiers & their lives threatened. The ~~rebellious~~ rebels were driven out in time to save them by regular troops from Yunnan.

- (22) As perat Sunday on a shooting trip with Preerson & Albertsen. We went down the valley to the great hot spring about 15 miles away. The spring is situated in a deep narrow V shaped valley. It is of large size about 12 feet in diameter & it throws up a great volume of bubbling steaming water. About the edge of the spring is a bright yellow ring of sulphur & the odor of sulphur is in the air.

strongly. The rock formation
is lime + the spring has a
white deposit of gypsum about
it with some sulphur on the
surface. This is apparently a
~~live~~ ~~spring~~ spring with some
lime sulphur infused.

Several stone bath houses for one
for 5 + then 2 have been erected
nearly + water led thru them.
Only 2 Chinese were bathing
but in the winter great numbers
come here + stay winter ~~there~~
some that the house took fire +
burned up some of the bathers
at night. We ascended the
steep hill to the plateau
where alders pines + bushes
give cover to birds + animals.

Here we met the boy with
the 4 pointers + our guns.
With the dogs we searched
about them for some time.
The first bird met was a
painted quail which the dogs
pointed well but I missed the
shot. Later a pheasant
was flushed by trailing of the dogs
but none shot as no pheasants
are shot in the breeding season.

by the European residents,
Finally I jumped a hare
which ran straight away &
I hunched him over easily.
Then we had lunch & I
skinned the hare which was
nursing ♀. ~~At~~ at 3 P.M.
we again went hunting with
the dogs & Grierson. Gove
shot at a ~~hare~~ hare but missed
it. The old dog Sport finally
came to a point in a bush &
I went up & flushed a
covey of 7 partridge 2 of which
I shot (a right & left). Then
we turned back to the road
& the dog Sport trailed a
pheasant 50 yds & then flushed
it. Albeston shot it & it
proved to be a Amber. On
some of the side hills I saw
hundreds of Bambergs where
the green grass was just coming
up after burning. The day
was pretty overcast but without
rain & very pleasant. The
dogs were interesting &
gave us all our bird shots but
they flushed no hares.

The hill country is covered by
a bright red soil. Red fields
cleared for red rice were seen
in many places. This crop
is raised without irrigation
on hill tops & plains. From
where we had toffun we could
see far down the Taiping
valley where the Bhamo
road runs. We returned
in 1 hour at break neck speed
over a good dirt road &
reached Grierson's house at sun-
down.

(23) ~~Returned~~ Visited the waterfall
at Teng-yueh. It is on the
lower or west side of town & is
formed by the creek which runs
thru the valley dropping over a
lava cliff about 50 feet high.
The falls spreads out very prettily
in spray. Immediately above
it is a stone bridge.

(24) At 9 AM. we left Grierson's
house for the goral camp
& took a road leading north
across the valley & thru a deep
valley near the two large conical
mtns. At noon we were near

some ponds
the lake at their base. These are
adouble affairs with reedy
• margins + of small size.
Some white herons + black storks
were seen here but no ducks
or geese are here at this season.
• After tiffin we passed ~~up~~^{thru}
a narrow pass from which
we could look back + see the
• deep crater lake just east
of our road. It is called
Chin Hai (green lake). We
could also see the high range
which marks the Salween -
Shweli divide. It extends as
a wall without any low passes
• + two of the peaks showed patches
of snow. The sides of the valley
we passed thru was clothed in
white pine, alder + a dark leaved
• poplar. At 4 P. M. we reached
the Lava beds which cover a
wide area here. The lava is
covered with soil in ^{most} places +
• supports short grass + pitch pine.
The Chinese have made hedges
of it + divided the land into
small fields but I ~~was~~^{they were}

at this time abandoned + grass covered. we stopped at dusk at 6:45 at a village in the lower fields. Below us in a deep gorge the Shweli River roared. Rhododendrons were in blossom in the forest bordering our road. There was a rose ^{pink} species, a large white flowered one + the large carmine species. No other flowering trees were in evidence.

(25) In the early morning we went with the village guides to a forest hunting. Our way led over the bridge + then another village + then down the river following the base of some cliffs. Just after passing the village we sighted 2 muntjacs, a ♂ + ♀ feeding far below on a grassy hillside. I hit the ♂ the second shot he rolled down hill a few yards + then hid in some weeds. Later he got up + ran swiftly down hill into cover where we

could not find him. The ♀
ran down hill but in a different
course + later I saw her ^{near}
the river + shot her there on
side. We found her with
difficulty by the blood spoor.
She contained a large fetus
~~was~~ spotted with white + with
a few days of birth. The
stomach contents was leaves
stems only. We followed
the steep river side down
over some grass burnt cliff
where I saw 2 gorals, at
150 yds I fired at them
but I missed both shots +
they escaped along the cliff
+ down the river. I then
returned to search for the
wounded muntjac. A car
tunnel down the river for more
goral + shot one. In
the afternoon we moved
camp over the bridge
to the other village which
is nearer the goral haunts.

I went down on the road on
west side of the river to look
for a large goral I shot at in
the morning across the
river but we could not find
it. Going down the river
further however saw 5 gorals
feeding across on the other
side at the same elevation as
the road at 400 yds. distance.
I shot 3 of these, 2 old ♀s &
a old ♂. We then retraced
our steps to the bridge &
followed down the river to
where the 3 gorals had
fallen down hill. One of
the ♀s contained a large
bained fetus, All 3 had only
leaves & twigs in their
stomachs. These gorals
were on an open short grass
hillside in plain view &
were only bewildered by the
shots owing to the distance.
The two escaped finally in
some cover but none of them

red, pink + whitish ones occur,
a small yellow, white rose is
a common shrub here. There
are however practically no
animal influences except a few
yellow fox in damp meadows.
a beautiful violet iris occurs
in the swamps at Hei-yao.
The trees apples + cherries are in
fruiting their flower season.
Hunting with local men
here for sambar has proved
quite unsatisfactory owing to
their want of understanding
us or we them. We cannot
be persuaded to accompany
us a field so there is much
lost motion every day.
They do not see why we should
not accompany the dog + beaters
thru heavy forest or cover all the
in such places no game ~~could~~
be would come in sight. They
don't realize that they must
beat the game out into open
fields where we can shoot
it at a great distance. No
being able to speak to them

their language we must
in ~~any~~ follow them blindly about
which is very irritating. Samblers
here are easy to move out of cover
+ if we could only get the men
to drive them on way we
would have 14 or 5
instead of only one which
I secured by refusing to follow
my guide into cover but
remain in a field where I
could see all the surrounding
fields + shot the stag as it
left cover + crossed one of the
openings. The chimneys are
very distinctive + difficult
to detect on this account.
They always seem to have
some better way of doing anything
than you suggest + they
insist on doing it their
way.

(15) Two Liro hunters assisted me
today with 3 small hunting dogs.
We beat out the ravine of the
two samblers but saw nothing.
In the forest at the summit
the dogs ran a mountain
then the forest + down into deep

ravine but we did not see the animal. The dogs never returned
+ were lost for good. Along
the way I saw white strawberries
but they were ripe. A small
red strawberry was also seen
on some hillsides. I
have also noticed a ruby
red blackberry + a yellow
cherry of better flavor than
the red variety.

(16) The dogs having arrived
at camp I went out
with the dog for Saubhan
crossing the high ridge + going as
far as the temple on the crags
the base of the Salween Range.
We saw no game but
covered much country. On
the ridge I saw a fine large
spreading magnolia tree in
blossom. The flowers were
than our cultivated tree but
of the same cream color.

(17) Today was cloudless the
first clear day we have had
in a fortnight. We moved

camp 30 li over the ridge
to a village near the
isolated temple. In the
afternoon I went out to
still hunt Sambhur but
saw no game.

(18) In the early morning
we went out with 4 lions
& their 3 dogs to drive
Sambhur on the river side.
The dogs drove out a number
only but it was too far away
to shoot. ~~In the~~ (the lions)
did not return to camp so
I went out still hunting
in the afternoon going up
the valley & over the ridge ^{where}
we had hunted before to the
rice fields on the Wa-tien road.
No game however was seen.

(19) ~~We~~ We returned to our
old camp near Hui-yao
as Sambhur hunting had
proved a failure. I decided

return with the caravan
but took a route up the
valley it over the ridge to
our old first Sambhur camp
at the base of the temple mts
I lost my trail & had some
trouble find it again. Here I
found on the banks of the clear
mountain stream many logs, a
few black hummers & signs of
small mammals. We have
not collected any small
mammals here yet although
they have been set out at
both the gorak & Sambhur
camps. The place at the
base of the temple looked
favorable however.

(20) Last night after making
camp I went goat hunting
across the river. I saw 2
on the cliffs but failed to
shoot any. This morning I
took a trip down the river
opposite where I shot the
goats but saw no game.
Since our return the natives have
excited two fish traps with long

units leading to them and
these fence-like units extend
across the river.

(21) A trip ~~over~~ above the cliffs did
not produce any game so
I beat out a hillside for
muntjac but failed there
again. On the way back to camp
I fed on the delicious yellow
blackberries which grow by the
roadside. There was a black
sweet species growing here also
which was new to me. Bushes
of white single roses of sweet
fragrance. Yesterday I saw a
Turpia among the rocks of the
river side, the first I have seen
here.

(22) It has been cloudy the
greater part of each day but
very little rain has fallen
at Hui-yao camp. This morning
I saw a troop of the Rufous Macaques
but failed to hit any. There were
some newly born yod riding on their
mothers backs. Several of the
old ♂s were very large. The flowering
season is now practically over
the *Rhododendrons* & other trees being

in fruit.

- Recently we have been ^{having} boiled bamboo shoots at the table. They are quite unlike our vegetables in taste, possibly nearest the flavor of an artichoke. A common table bird all thru Yunnan is a black skinned chicken. The ^{muscle} sheaths thru the whole body are deep black + gives the bird a peculiar appearance but the taste is normal. The actual muscle is white as in fowls generally.
- The common crop here which I thought was sweet potatoes is really buckwheat. It is grown everywhere on dry hillsides & is used as flour for bread.
- (23) As our success was only 2 geese in 3 days hunt we broke camp this morning & journeyed in to Tengyueh. The way led down the valley & over a rickety suspension bridge across the Shweli. The commonest flowering shrub of the roadside

were the white bells of an ^{Ericaceae}
in drooping panicles much
like Lilies of the valley in shape &
size. The white number of
a sweet scented shrub having large
white-ray or display bracts
was conspicuous on the road.
Plum, ferns & brakes are the
prevailing growths in forest &
under trees generally as well as
on open hill-sides.

Hillier in his book on the
Chinese language says
it is a difficult language
for adults to learn but
babies learn it far easier than
English or European tongues.
In 2 years he says a European
adult can converse in it
but it requires at least 10 years
to speak proficiently. Japanese
he says can be acquired in
2 months a working
knowledge sufficient to make
wants known. The
men at Tung-yueh custom
house who speak Chinese
say this estimate is quite
correct.

weather clear. Unpacked
24 specimens.

(25) Went out early at daybreak
with Albertsen to hunt
wild red dogs on the slopes of
the large hill just south of the
Custom house & only 2 miles
out of town. We saw no
game but Albertsen & Palmer
have both seen a pair here
several different times
& gotten within 100 yds but
never shot a gun range.

(26) Again I went out for
wild dogs, this time with
Palmer to the same place
but we saw nothing. The
morning was rainy & misty.
At 3 P.M. As I was looking
out of Mieson's veranda I
saw a red fox running
across the field which
approached & ran between
Hatcher's house compound &
Mieson & hid in some bamboo
near the city wall. A black
dog had flushed the fox & was
following it slowly & with
difficulty & soon gave up
the chase. This is the first fox I
have seen in China.

On the late P. M. I visited
the custom house. They
have a good library & many
Sardinian magazines. In the
goods shed they have a series
of samples of all medicines,
food products, textiles etc. which
pass thru. I saw here for
the first time the edible
bird's nest. The nest was
runner shaped & flat on the
side where it had been
attached to a wall. It was
opaque waxy cream color
without any disagreeable or
fishy odor. Shark fins, dried
& transparent amber color
were here also. Passing
thru the customs I saw 2
pairs of Sambar horns in the
velvet about half grown ones.
These are very valuable for
medicine & worth when fresh
Kang 50 taels. When hard
they have no value as medicine
practically & fully grown
horns are only worth 1 tael a
pair. Several bundles of
muntjac skins were also passing thru.

at 4 P. M. after office hours Alhulsen Palmer & I went out to the gold mine & played a round. The hills are with rolling plains around the raised graves of the Chinese & the ground is thus quite rough & full of hazards. Seven to a hole is a good average here.

The Customs Officers, 3 English men & one Dane, live here in great luxury, altho their pay is not large. They have horses to ride, shooting dogs, fine houses set in great open compounds far from Chinese quarters. These luxuries at home would cost several thousand dollars annually. Their office hours are short.

10 A M to 1 P. M. on hand for Kiffin & 2 P. M. to 4 P. M. The

rainy season is said to be drawn often but there are sunny spells always when travelers port is possible.

(30) At the custom house
I saw this afternoon 3 pair of
elephant tusks passing
them. One pair was large
the weight of the pair 90 lbs.
Albertsen said that the only
larger pair he had seen was
105 lbs the pair. The value
they set was only \$2.50 gold a
lb. for the ivory.

(31) Day rainy in spots, at noon
a short heavy thunder shower
passed over the town.

June 1 We departed from Tangyueh
at 8 A.M. in a light misty
rain. The road led down the
Taiping river thru a narrow
valley filled by rice terraces. Many
Shan women were seen here with
the Chinese transplanted seedling
rice plants. This is the height
of the rice planting season +
all the fields are flooded. Two
hours and we met the low
fields thru which the road runs
for a few miles. These fields
are rough, piles of lava rock
with ~~cracks~~ ^{gullies} between and there
is no attempt at cultivation.

Maues. Teng yueh + Vicinity

1 Goral (Nai-yang)

Abundant at Hui-yao on the cliffs of the Shueh where 23 were shot in 2 weeks. ♀s in early May in foal, young born in middle (last) of May, one only. Color at birth as in adult. A sharp birdlike bleat of alarm uttered at rare times. Food grass + shrubs.

No apparent carnivore enemies such as leopards or wild dogs. To have heavier horns at base but not longer.

2 Serow (Shan Xi) (than ♀s)

One yg ♀ (2 years old) shot by A on a cliff above river. No others seen or any trails or dung.

Rare according to native report.

3 Muntjac (Chee-tzu) Cervulus

Four were shot by me at the edge of woods at Hui-yao. Two were

♂s, one with large hard horns + the other with out tips, only the haired bases. The ♀s both had a single haired embryo.

Muntjac were seen at Wa-tien

also and at Teng-yueh the Rinstons men shoot many every year. Only a few heard barking but they are said to bark the year round.

x Deer - Wild deer not known here.
but on Bhamo road near border.
4 - Sambar Cervus (Rusa)

One shot by me near Wa-tien
a fine ♂ horns hard, lg. $27\frac{1}{2}$ inches
This one was with a ♀ + both were
driven out of a forest by dogs +
men as beaters. Shot as it ran
up over an open field of buckwheat
on a hillside. A single ♀ was
flushed that evening in bamboo
at edge of forest. Next day the
beaters drove out a ♂ but it escaped
unseen by us. The following
day a ♂ + ♀ were driven out of a
deep wooded ravine but escaped
before we got into action.
None were ever seen still hunting
at edge of forest but the natives
said they sometimes saw them
at daybreak on edge of clearings.

5 Ursus (black large)

A large black bear is reported
in the forested mountains.

6 Ursus (black small) Lao-shing

Outs of the common black
bear were brought in T. ang-yueh
in middle of April which were
small + perhaps a month old.
Later another pair were

runned rapidly. The fetus was gray like the parent in color & within a few days of birth. None of the goats or mountain goats were in fat condition.

(26) In the morning we again went out for goats. A on the east side & B on the west. Another goat, a yearling, fled to my rifle at 400 yds across the river. In the afternoon I shot an old ♀ in the same spot practically. She was on a cliff when I hit her & she tumbled down on her back. Her fore legs were broken high up only A. was near the river & he came down & shot her thru the neck as she fell ran to the river margin. She then floated down stream & was recovered by one of the men who followed it down stream. This one also contained a large fetus. It is quite evident that I early in May the kids are born.

At dark Grierson arrived from
Tampabay to spend the
week end with us shooting
gorals. He brought with him
his pointer dog & two ponies

(27) Grierson went shooting
with A down on the
east side of the river while I
kept to the west side
on the rim of the cliff. They
shot a goral which I chased
down by shooting but unfor-
tunately hit it in the head
& blew off the top of the skull
after shooting it threw the body
fatally but failing to drop
it dead. A large troop of
red Macaque monkeys
was seen on the boulders
lining the shore & A bagged
three, a ♂ + ♀ + half grown yg.
In the afternoon we went
to the same country & I
bagged another goral, a ♀ with
fetus but A & Grierson got no
shots but they picked up my

arrived on the water's edge.

- (28) Grierzon & I went out in the morning thru different country following the crest of the valley for 100 feet above the river. Here we saw several goral. Had good near shots but B. not being accustomed to a rifle missed all & I could not shoot without wasting his chances. A visit to some hot caves & returned with one bat.

- (29) The weather has been cloudless daily until today. ~~but~~ No rain has fallen today however. We went out in the morning making a dash to find a goral for Dr. to shoot but failed. I saw 3 from the west ~~side~~ side across the river but missed them at 4 or 500 yards distance. While I was sitting watching for game one of the large red headed barbet, perched in a pine tree 10 feet away began the true frog like call which

we heard so often in the
Schwaben valley + thought it
a frog call, it is repeated
over & over again & is very
frog-like & deceptive, Our
camp is pitched at the
village of Hui-yao (Line
hill) in a grove of trees
around the houses. The
country here produces much
lime & tiles are in operation
in many places. The rock
used is a white marble mottled
with gray. A fierce fire of
branches is kept burning
day & night for about 4 hours
in order to burn the lime
which is piled at the top in a
sort of porous chimney.
Lorneism returned to Peng-yueh
^{starting} at 3 P.M. ~~where~~ & will arrive at
"dark on his spirited pony.
He has two very good live ponies
which cost him \$50.00 each ^{here}
in Chinese money. Should
they would be worth \$30.00 gold each.

(30) The first day I hunted
goral I was attracted to
one by a sharp bird like
snort or bark. This sound of
alarm I have not heard
since & is given only rarely.
Teng-yueh is a walled
town the wall of the same
size & structure as that of
Tchi-fu. Outside the wall
is a cleared space or
grassy meadow & a shallow
dry moat. Inside the
town are many open gardens
& even ponds, many of the
people call the Europeans
living outside the town.
The streets of the town are
wide like those of Yunnanfu.
The morning hunt for
goral netted nothing but
in the afternoon I shot ~~the~~
a fine large g which was pointed
out to me by a party of Chinese
from the road. He was lying
asleep on a ledge near the base
of the large cliff about 300 yds
from the west rim or road.

I hit him thru the shoulder
+ dropped him dead on the
fifth shot. Then I continued
my way down the road to
my usual watching place.
Here I saw a party of 3 goats
an old ♀ + 2 yearling kids
almost equal to her in height.
I shot at her + she ran a few
yards on a steep sidehill
+ stopped. Then Andrews
rolled rocks down from above
to frighten them but she only
took refuge under an overhang
rocks + let the rocks roll by
unconcernedly. One of the kids
did likewise + the other
which I shot at ran a few
yards into a large hole
or small cave + completely
disappeared. It did not
reappear in the hour + a half
we remained watching the
cliff. Rolling rocks the goats
understand + know how to
seek safety under shelving edges
but shooting is liable to confuse
them but they are learning fast
to rush to brush cover at the first

shot & remain there out of sight. We had a little rain today.

- May 1 We each shot a goral today. A on my side of the river in the morning shot a yearling which had a protruding upper jaw; the lower one striking the palate far back so that the lower lip could not meet the upper. In the afternoon I shot a dark ♂ about 3 years old just reaching maturity. Getting this one made my longest shot (500 yards). He was so far away that the men could not make him out as he lay or full length on a rock beneath a pine tree. The first shot killed him striking him in the middle of the back & breaking it.
- (2) In the morning I took my two guides Slow-yi-li & a villager & proceeded down the river following the upper

rim of the cliff on the east side. The villagers espied a goral resting far below on a boulder under a pine tree. I hit it the second shot & it rolled down out of sight. They went down & brought it up the steep cliff in a half hour. The stomach of this animal which was an old ♂ contained alder leaves & twigs but no other material or grass. The cliff side has many alder trees & alder scrub growing on it making a convenient fodder. The river (Lung Chong) were here hunt goats ~~has~~ runs thru a fault valley of non-conformity. The east side is limestone, the cliffs being rugged & high with caves in places. The west side of the river is basaltic lava in a series of steep terraces or distinct flows. Bordering the river edge on this side are basaltic columns in places. A shot at dusk ^{goral} at dusk.

③ This morning I shot a young goral on the cliffs after I had

flushed an adult from the grassy plateau at the summit. This yg. contained in her stomach grass chiefly with some shrub I could not identify. No goral were shot by us on the p. M.

- ④ This morning I bagged another goral on the cliffs by a shot directly above ^{at} some 40 yds. This one was a virgin ♀ 3 yrs. old. The stomach contents was largely grass. In the afternoon I went across the river then the market village & down the road where I bagged two more gorals. The first one was a ♂ grazing on the first cliff & on a level with the road. He was 300 yds away & I missed him the first shot. He then ran under a fallen dead tree & stood where I could see him but when I shot he rolled down cliff as tho run but suddenly fell over backward & rolled off the cliff dead. He was shot thru the heart.
- Returning from down ^{the} river the guide pointed out another goral standing at the mouth of a small cave near the same

place. I took - shot at this
one as it stood facing me &
it fell down dead at the
mouth of the cave & stuck there.
It was too dark to send
for this one the same hand
set. Next morning we found
it on the cave dead having
been shot there the night.
It had an old wound in the
shoulder & this is why it
had taken refuge in the cave.
On skinning it I found a
large fetus ready for birth
with hair & well formed hoof
& teeth. The kids are born
I should say the first &
second weeks in May as
evidenced by these embryos.
Today was my best as regards
marksmanship. I shot 2
gorals at 700 yds, one with a
single & the other in 2 shots
& a third goral I shot
from above the cliff hitting
in with both shots each of
which were fatal. I had
only one miss & bagged 3 gorals.

(5) In the morning I saw
no gorals on this side of the
river where I had 2 wolf traps
set. I was the only one hunting
today & bagged a goral in the P.M.
from across the river. I hit her the
first shot at 30 yds thru the
shoulder & she rolled down hill dead.
No other gorals were seen missed.

(6) This morning I saw a mountain
goat on the same spot where I shot my
first one. This one escaped into the
bush. Later I saw a goral on the
cliff & missed that. I been on the
way home I shot a dead
mountain goat which may mean
some sort of some brother. She had
a small butler's embryo within
a month or more of birth. Her
stomach contained a mass of
leaves & twigs of alder or
birch; no grass. This afternoon
at noon we had a heavy thunder
shower which lasted for two
hours but at 4 P.M. it had
ceased & I went out across
the river along the road &
spied out gorals. I saw one on

the first cliffs + hit it after a few shots but it was not badly wounded tho it kept in sight on a rock. After several shots I finally killed it with the next to my last shell + it rolled down hill + died. When they brought it in I found that two of my shots had passed thru its right ear as it faced me. It was a wild ♂. A man up the river has found no game or snow here altho the country looks like the goat cliffs.

(7) Travelling down the valley I met a goat on the first cliff + shot it thru the lung the second shot. It fell only a short way to a ledge. When the men went for it they flushed another goat which ran away before I could get into a shot. Farther down the valley and the high cliffs we saw 3 other goats in a herd but I only got one shot at them + missed my mark. I took up the

steel traps set for wild dogs
+ civet cats (*Paradoxurus*).

- It is strange that the
goral cliffs where gorals
are numerous are not the
haunts of leopards + wolves
as well. Apparently the gorals
live here unmolested as no
sign of danger or tracks of carnivores
were to be seen here. The
goral I shot was a young ♂ with
2 antlers. Her stomach
was filled chiefly with blades
of green grass + some shrubs.

In the afternoon I went out
beating for muntjoe but
flushed nothing. A collected
some 17 bats (large *Myotis*) in
a cave near the river.

- (8) Set out this morning to
hunt serow with 7 men
who took me down the river.
On leaving the camp I saw
a muntjoe in a bean field
across the valley 3 or 4 days away.
I fired & it dropped shot the
side. It was a fine ♂ with
horns in the velvet or rather

without the hand prints projecting beyond the skin covered bases. No scrow were seen or other game but I saw two small troops of Red Macaques across the river. These monkeys sat on branches eyeing at us & at intervals leaned forward from their perches & dared us with bared teeth. At the river 6 miles below camp passes there a vertical basaltic gorge or cliffs. Here the columns are distinct but often twisted in semicircles or at right angles given the cliffs a peculiar aspect. Near camp this side of the river shows granite boulders & cliffs instead of limestone. In the afternoon I took a ride down the river on the opposite side to where I saw the monkeys in the morning. As I reached the place I saw a pair of adult muntjacs feeding. I shot the ♂ hitting & breaking the hind leg but it went down hill & traveled thru grassy hills. Finally I saw it standing

- A shot BB did not without effect
It ran far in since edge where
• one of my men headed it
off & held it ^{by a pole} until I came
& killed it. It was a fine
• old ♂ with heavy hard horns.
The ♂ shot yesterday had
no hard horns projecting
beyond the skin covered bases.
• It was a solitary animal & not
yet breeding I suppose.

⑨ In the early morning I
went with A to the same
place as last night to hunt
for muntjacs. We met a
• party of Macaques at the bridge
near the village & fired several
shots at them but tagged none.
• Later A shot a yg ♀ serow
from the cliffs below the point
where I saw muntjac yesterday.
The serow was quite black & ^{much} darker than those of
• Sichuan but this may be due
to age & spring pelage. The
stomach contained both grass &
& leaves of bushes.

(10) We broke camp this morning & traveled to Wa-tien, a small village north some 3 hours. It was cloudy & at noon we had a quiet 1/2 hour of rain. Camp was pitched well up the Salween range below the Houch Shan T'ing village. On the route over we passed thru hilly country of granite formation with rice terraces & were by all the valleys & prime forest & trees on the hillsides. The common pine, a white pine & chestnut trees were the commonest trees. At some of the better paper making was in progress. This cheap brown paper is made from bamboo stems. The stems are first boiled in lime to decompose them & then they are soaked in large tanks & macerated so that the fiber forms a past mass. A fine screen tray is dipped into this & a surface of fiber is skimmed off which is further off & deposited carefully

by reversing the way. A stack of leaves is thus formed & dried to so as to form leaves of paper.

Before reaching Wa-tien we crossed the Shweli on a curved high, rounded bridge. Here

at the village it is a shallow stream flowing lazily through a broad valley & has much

the appearance of the Nam-tung River at Mung-tung.

After making camp I went out with local Chinese guides to look for Sambar. We found a few tracks & trails in the scrub alders but saw no game.

At 5 o'clock a heavy shower met us & we were drenched for 1 hour. Then the sun appeared & a beautiful double rainbow hung in the east the most brilliant I have ever beheld.

The crops of the hill country are mostly ~~potatoes~~ ^{sweet potatoes} which are several inches high. They cover large

areas at Hsin-yao & Wa-tien. The rice fields are just being ploughed with oxen & buffaloes. Some the seed beds are already green. The rice is

not planted until the rain
in late May + June. No maize
has yet been planted which
is also a summer crop. I saw
quite a number of red rooster
grasses a woody tree like bush.
The berries were bright crimson
tasted well. Along the road-
side the common broad leaved
bramble is in fruit the small
golden fruit being edible but not
very luscious.

(11) This morning I shot a fine
old Sambar which I saw
with 3 dogs drive from cover
where I hunted last night.
I hit the beast thru the
shoulders at 400 yards as it
ran thru a bean field.
It ran over the hill + we
followed the blood +
found it dead in a forested
ravine below the ridge.
The bullet had gone clean thru
both shoulders + chest filling
the lungs with blood + sticking
inside the skin. The whole

under side of the tail was
covered by a heavy brown gland
to its tip as in the ♀ we
brought at muchang. Neither
fore or hind hoofs contained
a gland but the lockyard
gland was very deep & large.
This I was first seen with
another animal somewhat
smaller. The horns were
fully developed & hard & of
with large size $27\frac{1}{2}$ inches
long by 23 spread. This
must be the rut rather
than fawning season or else
these deer carry hard horns
most of the year round.
The stomach contents was
chiefly leaves of bushes & trees.
The body was lean except a
little fat on the brisket. The
Chinese were ravenous for the
blood in the chest cavity.
This they drank especially
the gray clotted masses.
Every vessel & every rack were
filled with blood to be sold for medicine.

a boy who was brought from
Tengyueh came solely on the
chance of getting some blood
from a Sambar for his sick
grandmother. He is planning
tomorrow to Tengyueh with
the blood. This evening
I saw a muntjac in a field.
Later we flushed a ♀ Sambar
in some scrub bamboo. We
heard a rustling noise like
pheasants making expected a
muntjac at most & waited
10 minutes for some animal to
appear. Finally the guide
then a fine one in the thicket
& we bolted a Sambar at top
speed but I missed her as she
darted from the trees. For
dinner we had some Sambar tendon
& it was delicious without strong odor
or bad flavor.

(12) We again went Sambar
shooting this morning taking
a course up the hill & along
the ridge where last night
I flushed the ♀ Sambar. After
quite a lot of beating a large
various pursuit of a wooded
ravine by the dog. Only one

- four men seen the animal
run across the fields which
were some 500 yds away. I
paid the dogs & men cross
the fields later but the deer
must have been a long way
ahead of them. In the
afternoon we beat the forest
near camp where the first Sambar
was shot but the dogs only
drove out a civet cat.

- (13) The same men & dogs
took us out again this AM
to a new place for Sambar.
Before we got in front of
the beater's large Sambar came
out across the ravine opposite
me but were in cover again
before I could get a shot at
them. They were not seen
again & we returned gunless
to camp. The morning mist
hung across the valley but our
side was clear. A misty rain of a
half hour's duration visited us at 8 AM.
At noon we had a thunder shower.

- (14) Our day was fruitless
altho I spent most of it
beating for Sambar.

at this season the wild fruit
here consists of a yellow black-
berry or berries of good taste, a
red dry raspberry & a small
cherry. The Chinese are very
destructive to all vegetation
& in order to get the cherries
they cut the large limbs off.
The result is there are very
few cherry trees left & such
have only a stubby growth of
branches left.
The flowering season is now
at its height but the forest does
not present any large areas
of floral display owing to the
great number of pine, oak &
alder trees. There are several
species of Rhododendrons now
in bloom & such trees & shrubs
are covered by a solid mass of
large flowers. There are two
species of large white Rhododendrons
which are visible for miles in the
forest. Then there is the deep carmine
tree Rhododendron + a ^{rose} pink shrubby
one. Smaller less conspicuous

bought by Fletcher the Commissioner
7 *Helis pardus*

A few sightings occur but we
saw no tracks
+ *Helis tigris* - Not known here

8 *Caniis* (wild dog) Yeh go
A pair have been seen by the
Customs Officers near the hill west
of the Customhouse. I went out
2 mornings but saw none.
We purchased a fine sanded
skin taken 7 days north of T-y.

9 *Vulpes* 2 species -

Albertsen has killed 4 or 5 in
Teng yueh. They are brownish red
with deep black feet. One skin
is much larger + lighter than the
others. Perhaps there are 2 species
here. I saw one run past
Briestons compound one
day at 3 P.M. One was
flushed at Hui yao by A.

10 *Panthera* -

One skull found at Hui yao
where the owner had been killed
+ eaten by wild dogs evidently.
Skins seen in shops at Teng yueh.

11 Pole-cat.

One skin purchased at Tengyueh

12 Civet -

Commonest of the civets here

13 Otter

One shot by Albertsen in
Tengyueh creek. Found in
all large streams sparingly.

14 Gray wolf -

One seen by former ^{commissioner}
also reported by natives in winter

15. Jackals -

Natives report them in droves
at times. Not seen by Customs
Officers, regular visitors

16 Felis (tiger cat) spotted

Found about Tengyueh

17 Mustela (weasel)

Occurs here also but not abundant.

18 Lepus (Hare)

Found on fern + grass hillsides
but not common. One on a day
beat is fair success. I shot one
at T-y + bought another in the
market. No others seen.

19 Porcupine —

Said to occur, not seen.

20 Bamboo Mole Rat.

Brought in to the market in the flesh at rare times. Burrows of large size with dung of this rodent seen on grassy hill sides at T-y, Hui-yao, etc.

21 Paradoxurus,

One brought alive at Wa-tien. Dried skins for sale often.

22 Red bellied squirrel

Several seen at Hui-yao & at Wa-tien.

23 *Eprinus norvegicus*

Horse rats common at T-y.

24 *Eprinus* (long tailed)

One caught at Wa-tien

25 *Trupia* (large)

One seen at Hui-yao. Rare

26 Mole —

Runways seen in forest at Wa-tien

27 *Mycterus* (large)
Many caught in caves
at Hui Yao

28 *Mycterus* (small)
Taken in caves at Hui Yao

29 *Mycterus* (medium size)
Taken in caves at Hui Yao

30 *Myotis* (black)
Two taken in caves at Hui Yao.

31 *Macacus* (red)
Three shot at Hui Yao on
margin of river. Large troops
seen here, 20-30 apes of all
ages, a few old ♂♂ + some
♀♀ with eggs riding on their backs

32 *Gibbon* (black)
Heard calling in the forest
near Ma-tien on several
days but not hunted.

33 *Semnopithecus*
Said to occur at Hui Yao but ^{not} seen

Tung-yueh District

The exposed rock surfaces
are not numerous most of
the hills + ranges are soil
covered + grass clad.

Soil when exposed on hills +
plains bright red clay except

on paddy field when it is
whitish gray due to humus ^{ferrous}

Granite underlies most of the
region + is exposed on ^{some} hills.

South of Lan T. y there is a great

lava sheet with rough scarred
surface covering a great area.

There is lava covering much of

the country from Hui yao
northward. Limestone was

seen extensively at Hui yao

+ at Wa-tien in Salween

Range. Hot springs, lime + sulphur
occur at two places near Tansyue

at Hui yao much lime
is born from a melted
marble abundant there.

Near this village were seen
great piles of cinders where
silver had formerly been
mined. These tailings are
said to contain much
copper but no use is being
made of them now.

Flora of Tung yeh district

1 Pine - pitch (*masoniana*)

Commonest forest tree covering great areas at Hui yao + Salween Range in watershed of Shweli River

2 Pinus (white)

Seen near Hui yao road + also at that village but not generally distributed.

3 Alder -

The common hillside tree in the Salween Range + at Hui yao. Seldom growing to large size, often forming thickets.

4 Chestnut

A common roadside + river-side tree at Wa tien + on Shweli River at Hui yao

5 Oak (small leaved)

Large oaks seen at Hui yao + in Wa tien district where they are used for charcoal.

6 Magnolia (A large white flowered tree seen in forest at Wa tien)

- 7 Rhododendron (giant crimson)
A forest tree on Mtus.
- 8 Rh. (white flowered)
Common shrub or small tree
- 9 Rh (pink flowered) flowers
a shrub on hillsides, conspicuous.
- 10 Cherry - In fruit -
A small choke cherry seen
in Wa-tien district.
- 11 Willows
A few stunted shrubs seen ^{on creeks}
- 12 Bramble (golden fruited)
A common bramble in fruit,
delicious taste, leaves obovate.
Seen widely spread previously.
- 13 Raspberry (pink fruit)
^{bushes} A few seen in Wa-tien district.
- 14 Rose (whitish) single flowered
A common bush
- 15 Bamboo - (tall 15-30 feet)
Thickets in Samblur country
in forest.
- 16 Pteris (common brake) 2-3 ft high
Abundant in pine forests
where fires are annually spread.
Covers many miles of dry hillside.
- 17 Strawberry (2 species white & red
fruited).

or removal of the boulders.

Here were seen many small
• bushes + a *candelabra euphorbia*
some 10 feet high was common.

At 2 P.M. we stopped for
• dinner at a hot springs where a
running stream of steaming hot
• lime water issues from the
hillside. Here there are springs
of boiling water clustered at
steaming on the hills. Traveling
we were heard calling here the
• first I have heard in Tengyueh
district. Just after leaving
Tengyueh we saw one of the
• leathery leaved giant fig trees
bearing small yellow figs.
• These trees continued on the
roadway where their great
spreading branches made excellent
shade.

After dark at 8:30 we reached
the bungalow at Nan-tien.
It was a large structure like
a temple surrounded by a high
wall & having two courts.
The building was two storied
the lower floor used for cooking
& baggage & the upper reached
by a stairway having 4 bedrooms
& a large dining room.
The place was very clean &
the wood new of a light brown
color. These ~~are~~ bungalows are
only used by Europeans, the Chinese
being excluded by a caretaker.
The night was warmer than
Tung-tien & clouded & humid.

② At 6:30 we continued on
way down the Taiping valley
keeping to the east side then a

the rice fields. The river here
flows slowly ~~than~~ passed low
banks & the valley looks much
like that of the Nam Tung but is
narrower. At noon we
descended the large hill, the
highest on the road which drops some
1000 feet in 20 minutes walk
over a winding road. The valley
at this point narrows & the
bed is sandy & unconsolidated
at this tiffin place which is
2000 feet altitude. The small
red fig makes its appearance
in ^{small} clusters of the
bloss close to the stem.
Another tropical plant seen
here was the great creeper bearing
immense bean pods about 100 ft long.
The pine & rhododendrons seem
to cease ~~but~~ along this point.

No rock in place has been
seen since leaving the lava
beds yesterday. The sides of
the valley are made of yellow
gravel or sand deposit. After
2, or 3 or 400 feet thick. ~~The~~ ^{where}
it is exposed in cuts or side
canyons entering the Taiping
valley. The bounding ridges
of the valley are about 1000 or
1500 feet above the Taiping River.
The Shans are in possession
of most of the rice field although
the village has a 50% Chinese
population. These Shans
are the 7 or 8 near high black
surtan like bang hair caps &
short skirts to the knee of black
or deep blue shawl like those
we saw on the Salween in
dress.

After tiffin we continued
our way following the
gravelly bed of the river.
The boulders + few ledges
bordering the water were a
white granite. Before ^{reaching}
Ka-nai the gravelly bed
spreads out 2 or 3 miles wide
having in former years carried
away all the soil of the bordering
rice fields. The accommodation
at Ka-nai was in an old
temple in the town which
was filled by the benches of
school children + quite littered
up with straw + dust. The
town is of considerable size
half Chinese + half Shan.
The climate here was quite
warm + the night muggy + rainy.

(3) Very few mosquitoes, ^{practically} none were about during the night. The morning broke with a soft misty rain falling. The entire day we travelled down the broad valley thru the rice fields, sometimes near the river but often as much as 2 miles away, the valley being about 5 miles broad. The river is shallow & runs thru a sandy bed ~~not impeded~~ ~~without~~ rapids or boulders.

Many shaws were met carrying loads to market. The women have a very neat appearance, the clothing always clean & un-^{paltry}. In the 90's it consisted of a short skirt to the knees

a jacket & a tall turban. The material is a black serge or cotton cloth. These women have good features & are ^{much} neater & more comely than their Chinese sisters. They are rather stout with heavy legs & broad naked feet. We stopped for tea on the river margin & saw many Shan men & boys come to the river to bathe & wash. Women also appeared bathing together in groups & this, I have no doubt is daily custom. The Chinese we never seen bathing either men or women. At 4 P.M. we reached Hsiao Hsin Kai a

Chinese village with a Shan
one nearby. Here the day
bungalow is situated. The
building was small, of one
story with only 3 rooms & a
small court with 2 sheds
During the day I saw ^{bananas}
^{plants} often & also a few Papaiyas
Rice is the only crop raised by
the Shans except a few beans
chilis & other vegetables. No
forest was seen on the ^{hills}
which are grass or scrub covered
without any attempt at culti-
vation. I have seen along
the road numbers of the
giant elliptical leaved fig trees
which are preserved for shade trees.
They have a large bore of tangled
roots exposed & very wide horizontal.
The wooden supports of the bungalow were much
eaten by ^{termites} & ^{beetles}

limbs, their spread is often
much greater than their height.
The I passed off at Hsiao Hsien
Kai was just 45 yards or 135
feet in spread with a height
of about 70 feet or less but
many larger trees were ^{seen}

④ The route today lay
level thru the valley amid
rice fields & villages so yesterday.
At 2:30 we reached Man Hsien!
a village of a dozen houses with
a custom house situated in
a narrow part of the valley.

The tropical forest here begins
to make its appearance as
a covering on the ridges &
hilltops where the Chinese
have no regard for it but there
are odd patches all the way
in ravines, etc. The day
was cloudy with some
misty rain. ^{stopped}

⑤ During the night we had
a heavy thunder shower & much

rain. The rain continued during the morning soft + misty. The road lay thru jungle all the day + skirted the mountain side high above the valley. The vegetation was dense + consisted of tropical trees, most of them unknown to me. I saw tree ferns of average height, a *Raphia* like palm, acacias, figs + an alder. This point is the upper limit of both tree ferns + palms doubtless. Two troops of monkeys were seen in trees near the road side. One troop consisted of 8-10 *Semnopithecus* + another of 10-12 *Macacus*, the brown species taken on the Namting River. On the paddy fields yesterday + day before the cattle heron in brown headed nuptial plumage has been common. Cormorants + a large brownish duck have been seen there also. One of the common sights at Tey yuh or rather the Tai ping River is the black drongo perched on the back of buffaloes similarly to the minah birds. At noon we stopped for tiffin at a iron bridged

European construction spanning
one of the lateral affluents of the
Taiping. This bridge is said
to mark the Burmese border
but there were no masonry
boundary monuments near.
However from this point
westward extended a fine wide
macadamized road with
iron mile posts which
was evidently the bed of
the proposed Tientsin
railroad. The grade of
this road was very gradual
seldom more than 5% &
broken limestone was used
as a roadbed instead of the
smooth block pavements
of the Chinese which forms
a cruel footing for pack animals.
The mile post at the bridge
registered 51 miles. Many
as well as
gandy & large butterflies were
seen in the road showing vivid
green, violet, reds, yellow & black.

We reached the bungalow at
Pa-chiao trai as the Chinese
call the place, the Burmese
name is Monkongka^g however.
The bungalow is the best
we have yet found. At the
first in Burmese territory.

It was neat, well furnished
with chairs, table, lamp,
beds & table service. The
house was one story with
wide windows letting the breeze
from the dining room which
was also furnished with a
punka. The durwan
in attendance could
speak neither English or
Chinese, but I suppose he
knew Hindostani. He was
a Shan truly enough.
The country we came thru

all day was solid forest on both sides of the deep ravine from which the Taiping River flows. Near the road a few ^{acres} of clearing & an occasional hut was ~~to~~ met. Insect pest much as biting flies were quite absent & the climate was not oppressively hot.

- ⑥ The night was cool & a rain shower of considerable duration met the roads & flooded the ^{streams}. The Taiping was filled by a muddy gray brown flood from bank to bank. Many ~~beauty~~ pretty waterfalls were seen yesterday ~~from~~ ^{near} the road & today I saw ^{falling like a ribbon of silver} very tall ~~one~~ across the valley. The birds seen in the forest are quite new to us. This morning I saw the long white tailed paradise flycatcher & a racket-tailed black bird (chango or flycatcher).

In several places numerous
red figs were seen hanging in the
road. They were 3 to 4 inches in
diameter & the size of an apple
but are of no commercial value. The
tree which produces them has
Chinese elliptical leaves of
ordinary texture & color. Several
other fruits were seen in the
road. Yellow plum shaped ones
& green olive like fruits or
nuts. Few flowers are to be
seen, a ~~small~~ plant
bearing white balsam like flowers
in dense spikes is the most
conspicuous. A red flower in
panicles is also common.
The stage was a short one
& I reached the bungalow
at Kalongkha at 11:45 AM.
The darwan was a Kachin
evidently & could talk no
English. He wore a turban or
rather his hair was done up in a bun
on his crown.

The bungalow was exactly
like the one last night in size
& furnishings. I have seen
on the road today several pairs
of natives (Katchis?) who are
short, dark & wearing skirts
& leggings heavily beaded &
carry loads ^{on their backs} by a ~~tumblers~~

The visitors book at the
bungalow in which each
person must record his visit
contained many names from
1909 down to date. Keizer

and was entered. ^{the Botanist}
George H. Overton was down

more often than anyone else.

Perrone, the Frenchman who
keeps a station at Atergavos

also recorded. The rain cleared
at noon & the afternoon was bright
& hot & less pleasant than
stormy weather.

⑦ The morning was only slightly rainy but continuously cloudy. At noon we reached another bungalow exactly like the one we have used & here we took tiffin. From here down the road left the hills & travelled thru a level forest country of gigantic clumps of bamboo & trees. Palms have only been seen occasionally & none have been larger than 15 feet high and were without a proper trunk. Tree ferns have also been rare & of medium size only. At 5 P. M. we reached Momonk, a Burman village on the edge of the jungle. Several shops were seen here & the houses were set on piles & made of bamboo like those of the Philippines. Many of the men here had their

thighs & waists heavily ^{stowed}
~~like~~ like those seen on the
Namu-tung. I saw about
the village many trees bearing
jack fruit, the first I have ever
seen. A coco palm was also
seen & many Papaiyas, ^{bananas}
The afternoon was ~~much~~
& very warm & the night
calm & sultry & very warm.
There is no intensive
cultivation here such as you
~~see~~ is to be seen in China
there being much waste level
land on every hand. The
beds of most of the streams
we crossed yesterday which
are tributaries to the Taping
flowed thru granite beds
great granite boulders
blocking their progress &
filling them with rapids.
No game animal or birds were
seen except small birds. A
single species of small lizard was

abundant on the road bed
but no other reptile was ^{seen}.

⑧ The night was warm & calm.
at dawn a heavy storm
visited us the rain falling
heavily for 3 hours accompanied
in the beginning by much
thunder. I took Woo's chair
& gave him the mule for this
last stretch of 3 hours - 9 miles.

The road is a splendid broad
affair 50 feet wide & well
macadamized with limestone.

No cultivated fields lined it
only bamboo scrub & park like
country of small trees & new
grass with a small village
at intervals. We arrived

at Bhamo at 10:30 & on the
street near his store we met

Mr. Holm, an Austrian merchant
whose has lived here many
years & is married to a Shan ^{woman}.

From his shop we went to
the Deputy District Commis-
sioner's Office, Mr. Farmer. He was

a young man very
cordial & gave us permission
to stop at the circuit house
& invited us to the club.

The circuit house we found
very comfortable & home like.
It is a ~~two~~ story building
with 4 bedrooms with bath
on the upper floor & two
dining rooms below &
has wide verandas in
front. It is nicely situated
opposite the Superbana
Club & surrounded by a
wide lawn. The beds were
spring cots furnished with
clean linen & the walls
are of wood painted white &

quite immaculate. The
Oberon ~~was~~ spoke English
& was a dark Indian & a
good cook. The meals
were good & of considerable
variety. At rising time
tea & fruit was served in
the bed room. Breakfast
occurred at 10 usually &
consisted of fried fish which
was fresh & fine flavored,
meat with onions, tomatoes
& potatoes, Eggs poached or
omlet, coffee, & fruit
mangoes, bananas & papaya.

Tiffin occurred at 2 P.M.
& dinner at 8 P.M.
On the Club at Sunday
we met most of the European
residents. They gather
here every night with their

wives most of the men
being married. The whole
company comprised about
15^{or 20} people. They played
billiards, bridge or billiards.
The golf course is not used.
The club has a fair library
in which I saw many
books on Burma, including
Kington's 'Land of the
Blue & of Joy'. The officers
here consist of the deputy D.C.,
A. Farver, a major & other
army officers. The women
seemed to enjoy the club
quite as much as the
men & the place is quite
home-like in atmosphere.
The town is spread out
with wide spaces of grassy
plain between residences.

The avenues are broad +
lined by shade trees. A common
tree is a red flower acacia -
leaved bean tree. The inhabitants
are mixed. Hatchings are
often seen, the ♀ in short
skirts of black trimm'd in
red braid + beads about the neck.
They are a stocky short race
about $4\frac{1}{2}$ feet tall only. The
Burmese are light skinned
with Chinese features but
~~are~~ prettier. Then there
are Indians of various tribes
with dark skin + short beards.
Chinese are seldom seen
except in the shops.

⑨ The morning was mostly
overcast but without rain.
A left on the express steamer
at 12 noon for Mandalay.

(10) I spent a quiet Sunday
at the Circuit House. The
government offices were all
closed but the shops in the
town were open & also the
market. In the afternoon
I took a garry & rode out
to a village 5 miles away
on the Teng Yueh road. Here
a tiger trapper lives. When
we arrived the headman
showed me a No 5 bear trap
with offset jaws weighing
about 15 lbs which he uses
for catching tigers. At the
present time he said no
tigers were about but when
they come & kill cattle
he sets the trap for them
He has caught 5 tigers by this
means. The skins are

all turned over to the govt.
which pay a bounty of 40 Rupees
Kohu bring the skins
from the govt. & ships them
to N. Y. where they are sold at
auction. To buy a skin
from Kohu it is necessary
to get the H. D. C. permission
~~with the~~ guarantee that it will
be taken out of the country &
not resold to the govt.
Leopards are also on the
bounty list the govt. paying
20 Rupees per head.

At dinner time in
the ~~current~~ house I noticed
4 geckos on the walls. &
They moved about after one
another & at times uttered
a chirping or cackling
sound.

In my bedroom I have
seen fine ones on the ^{wall}
walls. A large fire beetle
enters the house also, the

insect being about of a
dark brown, dome shaped
carapace $1\frac{1}{2}$ inches in diameter.

It gives out much light
from under its wing cases
when flying about $\frac{1}{2}$ candle
power. I should estimate.

(11) For at fiffin I tasted

the jack fruit a close
ally of the bread fruit +

a member of the same

order as the mulberry & fig.

The name is *Artocarpus*

integrifolia. The tree has

heavy green foliage & makes good

shade but is small sized. The fruit

grows close to the trunk & is nearly as

large as a watermelon.
The interior is filled by
large oval seeds ^{not} ~~not~~ ^{small} ~~small~~ ^{thin} ~~thin~~
beans about which is a thick
white sweet pulp in
flavor like the head of
a sweet watermelon &
quite agreeable to the taste.

(12) The morning was
bright & sunny but last
night we had a heavy shower,
I visited the native market
at 8 AM. The place was
filled ~~usual~~ with Burmese
women selling vegetables.
I saw watermelons, mangoes,
limes, bananas, jackfruit,
papayas, red pepperies,
potatoes, tomatoes, etc. fish
etc. offered for sale.

(3) The morning was
bright + sunny with
overcast sky in the afternoon
+ a light shower at sunset.
The smoking white
cheroot of Kipshing^{Mandalay}
is seen in use by women
everywhere. It consists
of a maize husk rolled
into a long tube & filled
by crumpled tobacco leaves.
The women are inveterate
smokers + are seldom
without the smoking white
cheroot ~~stick~~ which they
puff in their houses. Young
girls & boys smoke even
before they can walk it
is said. The climate
at midday is very humid
+ sticky.

Everything feel the heat.
The varnished promisher sticks
to your clothing when you
sit in a chair or lean on
a table.

(14) I heard one of the Burmese
bands played near the
Circus House & I went
hither & investigated.
The band consisted of several
bamboo barrel drums,
a flute, a series of brass
bells or gongs giving
sound like a zambur &
squares made of slabs of
bamboo. The music was
like that of the Turkish Hush-
Kuchi ~~is~~ sort of dance ^{music}
but there were no dancers.
The musicians were chiefly
boys.

I have seen quite a few
centles of Burmese design
natural rock with sharp
spires on the roofs gilded
Short cone shaped paddocks
with lime about 30 feet
tall are found here as well
as ancient weathered
aces of brick. Coco palms
are a common shade ^{tree}
about Burma houses but
are not used by the ^{Europeans}
as an ornament. There
is a mission for the
Katchins an American ^{Baptist}
Miss. by Rev. Ingram.
The Katchin boys play
volley football every
evening on a green opposite
the mission school which
has several buildings & grounds

grounds.

(15) During the early evening when the lights were lit many animals were attracted to my room. A large spider 3 inches across stationed himself near the lamp on the wall where he preyed on many flies & moths attracted by the light. The five geckos were on the walls in various places & at odd times two *Scotophilus* bats came in & crawled about over the floor like invalids & quite unable to fly. There were swarms of small beetle flies & may flies also.

~~down~~ The night was hot &
without a breath of air but
toward morning a breeze
rain shower cooled off
the air.

(16) Mr. John the Austrian
Jehovah's merchant
loaned me 140 Rupees
& I was thus enabled
to get away on the down
river steamer. Morning
dawned with soft misty
rain. The steamer left
at 12 M. On board were
^{English} a merchant wife from Tobia
on a tour of India, the wife
not being allowed by
measures to go alone with
hubby. The trip down
the river was fine & pleasant.

a cool breeze being
made by the boat at the
bow. at Blount the
river is 2 miles wide
but lower down it is
3 miles in places. At
3 P. M. we passed thru
the defile where the river
runs between great
forested cliffs & is only
100 yds or 200 yds wide.
At one point a cliff
1000 feet high rises
sheer, crowned by a few
trees at the summit. The
rock formation is gray
weathered limestone. The river
here shows considerable
current & a few boiling
whirls. The forest has

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no striking character
being green leafy trees,
with palms or tree ferns
but many bamboos.
Below the defile the river
widens out again into
broad flat country with
villages at intervals.
at 5:30 pm reached Kalha
the ~~beginning~~ RT3 connects
a small burmese village
with a white pagoda &
many houses bordering
the river. Coco palms
were here in fruit, also
a few palms from which
the toddy or beer is made.
Saddles were lashed to the
palms & down the length
of the stem for the
todd

Rec. Check \$1015.00 Mex
Expenses Rangoon to N. Y.
May 30th

Bhamo to Rangoon \$165.00 Mex
Cash - June 8

Hong Kong check - May 28/17

\$ 1128 $\frac{17}{100}$ Mex H. K. dollars

During the afternoon I saw
one of the penguin fresh
water porpoises show his
dorsal fin. The captain
says he sees them often
but they are never in ~~the~~ ^{groups}
only in pairs or solitary.
Water birds were singularly
scarce, the only ones seen
were a few - mackays or
cormorants.

(17) The night was quite
pleasant, ^{only a} few mosquitoes
came about the electric
fan kept me cool. We
left our anchorage at daylight
but the fog came up soon
after & blurred the landscape
so we had to anchor again
until breakfast time at 9 am.

fog is prevalent on the
river at this season.
The rain continued all
day & made the trip
cool & prevented the glare
off the water. At 4 P.M.
~~I~~ saw a ♂ peacocks
on the beach 150 yds away
which did not seem very
wild. The engineer said
he saw them often here
also spotted deer & jungle
fowls. We anchored at a
village for the night 3 or
3 hours above Mandalay.
Very few mosquitoes in
biting flies have annoyed us.
(18) At 9:30 A.M. we dropped
anchor at Mandalay. The
day was cloudy & pleasant.
Many steamers were seen here.

lying along the shore nearly
all of them privately I think
company, the only one which
operates on the river. They
have a fleet of 300 River steamers
40 of which have been loaned
to the Brit. Govt. for use sent
to the Tigis River, ~~and~~ ^{near} Mekele
there is a trolley line running
from the shore to the center of
town at the Bazar. The bazar
consists of long halls or stalls
in a well built stone building
all sorts of merchandise is sold
here as well as fruit, grain
& vegetables. The merchants
were nearly all women (Burmese)
attractive & vivacious. The
town is well laid out with wide
macadamized streets & ^{at} banks.
+ several streets are here as well
as trolley lines to various places.

I visited the palace which
is built inside a great
stone wall or fort with a
wide moat running
around it which is bridged
where there are gates.
Inside there is several
square miles of open ^{meadow}
ground for barracks by
the British & parade grounds.
The temple is now only
a show place. It consists
of one story hall supported by
great wooden pillars which
are gilded as are the
thrones & walls in places.
There is much gilt & small
mirrors or pieces set in
the walls & pillars, colored glass
to represent emeralds & rubies
are inserted in rosettes of mirrors.
A large cone shaped hill near

the temple grounds is used for
other shrines & temples, at
the base of this hill is a colossal
statue of a sitting Buddha
made of white marble.
In the fruit market I saw
many mangoes of two sorts,
bananas, limes, papayas
& much jack fruit. The
shade trees in the palace
grounds & about town were
species of true acacias & the
red flowered bean tree. I have
seen great numbers of orange
robed priests about the temples
& everywhere in town & on the
steamers. They look like the
Shan priests we saw at Meng-
ting. Scores of the Mandalay
Burmese came to the river to
bath. The women with their
children & their clothes to wash.
The adults never disrobe completely
but wear long gowns. They were

all able to swim but ~~did~~^{made} little
attempt to dive. The only native
game I have seen the
Burmese play is one
in which they used a
ball made of bamboo ~~strips~~
cibsa or basket. The men
stand in a circle & keep
the ball in the air by kicking
it striking with the knee
& by butting with the head.
This passed around to anyone
who can kick it or keep it
in play.

(19) The steamer left
Mandalay at daylight
in cloudy weather. A few
rain squalls visited us during
the morning, but at noon
the sun shone & a stiff
breeze up River blew all
afternoon. At 2 P.M. we

anchored at Potomac when
we remained all day &
night. The afternoon was
~~spent~~ employed by the
steamer loading many
large racks of white Boston
beans, barrels of varnish
leaves & bale of tobacco.
The river valley here is
flat for many miles the
mountains being far distant.
(20) A strong wind continued
to blow up stream all
day & night ~~falling~~ ^{blowing} ~~the~~ ^{the} ~~dust~~
landscape with dust. The sky
was overcast but no rain
fell. Just before ~~at~~ ^{at}
anchoring at Minnab for
the night we touched at a
station where hundreds of
oil derricks stood in the land.
Grass close to one another ~~forming~~
like a forest. Over 1000 wells

are said to compose this
forest. The river here shows
yellow clay or sand banks
rising perpendicular
some 40 feet or so. At
Munim where we anchored
there are mud volcanoes
of small size which throw
up a bubble forth a sort of
coal gas. The town
as well as the volcanoes
is situated some five miles
away from the anchorage.
We did not visit them.

(21) At 3 P.M. we reached
Prome in a drizzling rain.
Just opposite the anchorage
is a reef of rocks running
parallel with the shore. The reef
which was showing above the

muddy flood of the river.
The town is nicely situated
on a wide plain. The
streets are spacious & the
place beautified by shade
trees & ^{many} open park like
spaces. I have been ^{struck}
by the friendliness of the
English on board the steamer
in holding steady to me ⁱⁿ the
thick halcyon of the cold bank
type of English people ^{often} ^{found}
found in India. Persons
who show no sympathy
for anyone are not rare
here & are rewarded by
universal dislike. There is an
old chap on board an Oxford
man who is a judge in Madras
Province. He is both ~~wise~~

sympathetic type & makes
conversation with everyone
even on the third class deck.

Passengers consisting of Burmese
families. He talks to these
women who are quite
friendly & play with their
babies & assist his half-
dozen words of Burmese
in talking to them. He informed
that the Japanese divided the
world into two classes of
people, the sympathetic
& the apathetic, which
division he considered very
essential & fundamental.

The A. L. L. company is
a Scotch affair & all the
officers on the boat & shore
offices as well are Scotch.

The whole of Burma seems
to be settled or officered by
the Scotch, I have met
scarcely any other class of
British here. We have on
board the managers of the ^{company}
this wife, two Scotch women
married to residents of ~~Burma~~
officers in Burma, an English
man & his wife from Tokyo
Japan, a P.W.O. official
who has spent 15 yrs in Burma
is in fine health & spirits,
a 15 yrs old bride of an American
a well boarer. This girl is
a resident of Burma of English
scotch parentage & has been
Rangoon. The green leaves
I have seen in the market
are those of the Betel pepper (P.

which are chewed in connection
with the betel nut (Areca palm)
to form a red juice. These
leaves are seen on sale in all
native markets together
with the brown betel nut.
It is said ~~to~~ betel chewing
produces an astringent taste
only & is not a stimulant
except to the flow of saliva.
It appears to be a corresponding
habit to tobacco chewing.

(22) A day was largely rainy
& clouded. ~~There~~ Numerous
villages lined the shore &
extensive patches of banana
cultivation were in evidence.
At sunset we anchored
for the night at Harbyen
a village famous for its good
Burmese cheroots. The
Burmese women use a
deck parangas use a fine
powder of a clay yellow

made of the powdered wood
of a small tree. Pieces of this
wood they all carry with
them. The odor is pungent
the yellow color hides
on their light yellow complexion.

[23] Daylight found us on
our way up ^{Rangoon} ~~Pootsen~~ Creek
with a favorable tide. The
Creek is a short cut to the
Rangoon River which we
reached at 8 A.M. Paddy
fields under water bordered
the river on either side for
miles ~~as is~~ broken near
the shore by thickets of
sprouting coco palms.
at five miles we could see
distinctly the ~~the~~ gold spire
of the Shwe Dagon rising from
a small hill above Rangoon.
The River approaching the

~~town's~~ port is several miles
wide but muddy like the
driveway. The B. & O. Co.
have several refineries near
the shore where there is
a harbor battery hidden by green
hills & a few shrubs.
The docks are of concrete
work & well made
connected with the roadway
by iron bridges. The streets
are wide but the ~~sub~~
buildings & environment look
damp & sordid. I took
rooms at the Strand Hotel. In the
afternoon we had a very severe
rain storm accompanied by
strong wind but it only lasted
about half hour. Cotton one of the
passengers on the steamer down
river & Mr. Smith Mgr. of the
National Bank took me out
at 5 P.M. in Smith's motor to
a temple near the 200.

The evening was spent dining at Smith's. He is a bachelor & has spacious apartments above the bank. Cotton is a magistrate from Madras a vacillator & a very enthusiastic tourist.

(24) At 7 A.M. Cotton called for me & we visited the Shwedagon Pagoda. The morning was misty & cool. The entrance to the Pagoda is a long rising hallway or arcade on each side of which are ^{both} occupied by flower girls & vendors of candles & sweets. The Pagoda is covered over all by gold paint except the apex which is capped by gold plates & a golden lace work. At the base of the Pagoda are many small shrines of gilt & marble housing marble or plaster Buddhas. A great

bronze bell many tons weight
is suspended in a temple here.
It was dropped in the river by
the British vessel taking it away
& could not be raised by them. The
Burmese however raised it &
restored it to Rangoon. Several of
the officers killed at the
Pagoda which is surrounded
by a fortified wall are buried
near the Pagoda where they
fell. Zoological garden.
The Zoo is near the Pagoda in
a spacious park with trees &
lakes. The cages are large & airy
& contain local animals &
a few foreign ones. I saw a
Panda for the first time &
the keeper, a Bengali, said
this one had lived here several years
but most of them died ~~soon~~ ^{soon}
soon after arrival from Tibetan.

border where they came from
Several Eld's deer, the brown^{all} deer
were in the garden. They
had hard antlers of full growth
& were a fawn color with faint
white spots on the flanks.
Many gibbons were seen
& one hauled for us as we
were leaving. This chap bounded
exactly like those in his pen.
Several species were
represented. One was deep
black with white eye brows
another was blackish with
white hands & feet, while
another was pale brown
with white eye brows. All
the gibbons were gentle &
affectionate & pathetic in
their confinement. A remarkably
large Baboon from S. Africa
was seen in one cage. It

was ^{found} of the usual olive brown
color but had a great size
being 75 lbs in weight. The tail
was long abnormally. There
were Macaques & two
specimens only of *Simopithecus*
both small. Several black
bears were in a pit. Two
tigers, a pair of lions,
three black leopards & one
normal one were all the
cats I saw.